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MONTANA DEPARTMENT OF HEALTH AND ENVIRONMENTAL SCIENCES

ENVIRONMENTAL SCIENCES DIVISION

AIR QUALITY BUREAU

JEFFREY T. CHAFFEE, P.E., CHIEF





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## Sub-Chapter 1

## Variance Procedures

16.8.101 INITIAL APPLICATION (1) Initial application for exemption shall be in the form prescribed by and obtained from the department.

(2) Upon filing of the application, public hearing thereon will be scheduled. No hearing will be held until the requirements of the Montana Environmental Policy Act have been fulfilled. Time for hearing will also take into consideration due notice requirements set forth herein.

(3) Notice of hearing is to be served upon the applicant and the general public not later than thirty (30) days prior to the hearing. Notice of hearing is also to be given to the local air pollution control officer having jurisdiction, to all known interested persons and to any person or group upon request.

(a) Notice may be served upon applicant by mail.

(b) Notice is to be published at least once in a newspaper of general circulation published in the geographical area wherein the plant or equipment of applicant is located.

(c) The contents of the public notice shall include at least the following:

(i) Name and address of the applicant.

(ii) Time, location and nature of the hearing.

(iii) Brief description of applicant's activities, matters asserted, or operations which result in the emissions described in the application.

(iv) A brief description of the purpose of the hearing, including a reference to the particular statute and rules involved.

(v) Address and phone number of the premises at which interested persons may obtain further information, inspect, copy or obtain a copy of the application.

(vi) The legal authority and jurisdiction under which the hearing is to be held.

(4) Public hearings held pursuant to this sub-chapter are adjudicatory fact hearings to consider the proposed application for variance and its conditions.

(a) Any person may submit a request to be a party within twenty days after date of publication of public notice as required by subsection (3)(b). Requests to be a party under this paragraph shall be directed to the department and shall state:

(i) Name and address of the person making the request.

(ii) Identify the interest of the requester and any person or group requester represents.

(iii) Include an agreement by requester and any person represented by requester to be subject to examination and cross-examination, and in case of a corporation, to make an

employee available for examination and cross-examination at his own expense upon request of the presiding officer, on his own motion or by motion of any party.

(iv) Any request to be made a party shall state the position of the requester on the issues to be considered at the hearing.

(b) Conduct of the hearing shall be in accordance with "contested case" procedures of the Montana Administrative Procedure Act and the model rules of the Attorney General promulgated in pursuance thereto.

(5) Within thirty days after completion of the hearing, the presiding officer shall certify the record to the department. If the official of the department, who is to render the final order, or if a majority of the members of the board of health and environmental sciences, which is to concur in that order, was not present at the hearing or has not read the record, the decision, if adverse to the applicant, shall not be made until a proposed order is served upon the parties and an opportunity is afforded to each party adversely affected to file exceptions and present briefs and oral arguments to the department or board respectively. Waiver of compliance with this provision may be made by stipulation of all parties. Within thirty days following certification of the record or after final submission of the matter to the department, a final decision shall be issued. The final order shall include the matters and things set forth in ARM 1.3.225 including findings of fact and conclusions, separately stated. Notice of final order is to be given parties and their attorneys within twenty days following issuance of the final order. (History: Sec. 75-2-111, MCA; IMP Sec. 75-2-212, MCA; Eff. 12/31/72; AMD, Eff. 11/4/73.)

16.8.102 RENEWAL APPLICATION (1) No renewal of exemption shall be granted except on application, submitted on a form designated "application for renewal" form obtained from the department.

(2) Public notice of the renewal application shall be given at the applicant's expense immediately prior to the submission of the application, in the following manner:

(a) By publication and notice at least once in a newspaper of general circulation published within the geographical area wherein the plant or equipment is located.

(b) The notice shall state, in effect, that application is being made to the board to renew an exemption permit to allow the continued operation of equipment or plant at a specified address, which equipment or plant emits air contaminants not otherwise allowed by rules of the department. The notice shall also state the name and business address of the applicant.



(c) A copy of the notice, certified as to the manner of publication, shall be filed with the department concurrent with the publication.

(3) If complaint is made to the department on the application for renewal:

(a) Public hearing shall be held on due notice served upon the holder of the exemption complained of, upon the complainants, and upon the general public.

(b) Manner of service and publication of notice shall be the same as provided in subsection (3) of ARM 16.8.101.

(c) The nature and conduct of the hearing shall be the same as provided for in subsection (4) of ARM 16.8.101.

(d) The form of the complaint shall include, but is not limited to, the name and address of the complainant, the name and address of the holder of the exemption complained of, and a sufficient statement of the complainant to allow the department to give notice of the issues involved at the hearing. (History: Sec. 75-2-111, MCA; IMP Sec. 75-2-212, MCA; Eff. 12/31/72; AMD, Eff. 11/4/73.)

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## Sub-Chapter 2

## Enforcement Procedures

16.8.201 NOTICE OF VIOLATION -- ORDER TO TAKE CORRECTIVE ACTION (1) Contents of written notice of violation. The notice of violation may contain, but is not limited to:

- (a) The name of the alleged violator.
- (b) His last known address.
- (c) The number of the permit, if any, issued under sections 75-2-204 and 75-2-211, MCA.
- (d) A summary of the complaint made by the department including:
  - (i) The specific provisions of the statute or rule alleged to be violated,
  - (ii) The specific facts alleged to constitute a violation.
- (e) A copy of either:
  - (i) The order to take corrective action, if given, or
  - (ii) The notice of hearing requested by the board to answer the charge.

(f) If the board has issued an order to take corrective action, a statement in conspicuous type stating that the alleged violator will be found in default and the order will become final and enforceable unless, not later than thirty (30) days after the notice is received, the person named therein shall petition the board in writing for a hearing.

(2) Notice of violation shall be served personally upon the alleged violator, and acknowledgement of service obtained from the alleged violator or affidavit of service will be completed by the person making the service and made part of the file. (History: Sec. 75-2-111, MCA; IMP Sec. 75-2-401, MCA; Eff. 12/31/72.)

16.8.202 APPEAL TO BOARD (1) If the alleged violator desires to petition the board for hearing, the form of the petition shall be in substantially the following form:

- (a) The name, address and telephone number of the petitioner, or other person authorized to receive service of notices.
- (b) The type of business or activity involved, and the address of such business.
- (c) A brief summary of the accusations made by the department in its notice of violation, and the date of such notice.
- (d) A statement that petitioner denies the allegations in full or in part, and that he seeks a hearing to protest the issuance of any corrective order.

(e) The petitioner shall sign the petition, or it shall be signed by some person on his behalf, and the authority of such other person so signing must appear.

(2) If hearing is held, rules of practice as provided in contested cases shall apply. (History: Sec. 75-2-111, MCA; IMP Sec. 75-2-411, MCA; Eff. 12/31/72.)

### Sub-Chapter 3

#### Rehearing Procedures

16.8.301 STANDING (1) Any person aggrieved by any order of the board may apply for rehearing upon the grounds set forth in section 75-2-411, MCA. (History: Sec. 75-2-111, MCA; IMP Sec. 75-2-411, MCA; Eff. 12/31/72.)

16.8.302 FORM AND FILING OF PETITION (1) The petition shall contain the following information:

(a) The name, address and telephone number of the aggrieved party or other party authorized to receive service of notices.

(b) The file or docket number assigned by the board to the original hearing from which rehearing is requested, and any additional identifying title assigned to the original hearing.

(c) A brief summary of the issues involved in the original hearing.

(d) A statement of which subsection under the statute the petitioner asserts is the jurisdictional basis for the grant of a rehearing.

(e) A summary argument stating why petitioner is entitled to a rehearing under the subsection cited as his jurisdictional basis. (History: Sec. 75-2-111, MCA; IMP Sec. 75-2-411, MCA; Eff. 12/31/72.)

16.8.303 FILING REQUIREMENTS (1) The aggrieved party shall file his petition for a rehearing within twenty (20) days following his receipt of the board's written decision adverse to his interest. (History: Sec. 75-2-111, MCA; IMP Sec. 75-2-411, MCA; Eff. 12/31/72.)

16.8.304 BOARD REVIEW (1) The board must act within a reasonable time to grant or deny petitioner's request for rehearing, but in no event shall such time exceed thirty (30) days following receipt of said petition.

(2) Procedure shall be in accordance with the rules of procedure for adversary or contested cases if the original hearing concerned enforcement, emergency procedures or where

adjudicated facts were at issue; if the original hearing concerned variance procedure, substantive rule making or the establishment of local air pollution control programs, rules of procedure for appellate type hearings will be used. (History: Sec. 75-2-111 MCA; IMP, Sec. 75-2-411 MCA; Eff. 12/31/72.)

#### Sub-Chapter 4

#### Emergency Procedure

16.8.401 CONDITIONS (1) Emergency conditions exist if the director finds:

(a) A generalized condition of air pollution existing which requires immediate action to protect human health or safety.

(b) That emissions from the operation of one or more air contaminant sources is causing eminent danger to human health or safety. (History: Sec. 75-2-111, MCA; IMP Sec. 75-2-402, MCA; Eff. 12/31/72.)

16.8.402 ORDERS REQUIRED If the director finds that either of said emergency conditions exist, he shall, without delay, order the person causing or contributing to air pollution to reduce or discontinue immediately the emission of air contaminants. Concurrently with the issuance of such order, the director shall fix a place and time not later than twenty-four (24) hours after the issuance of the order for a hearing to be held before the board. (History: Sec. 75-2-111, MCA; IMP Sec. 75-2-402, MCA; Eff. 12/31/72.)

16.8.403 NOTICE OF HEARING -- SERVICE Notice shall be given the alleged violator concurrently with the order to reduce or discontinue immediately the emission of air contaminants. The elements of the notice shall be essentially as those given under ARM 1.3.213 with the following particular changes:

(1) Service shall be by telephone or telegram or any expeditious means other than mailing. The records of the department will reflect the time and manner of notice.

(2) All allegations shall be as brief and concise as possible consistent with understanding.

(3) The alleged violator shall be informed that he may be represented by counsel, but shall not be entitled to issuance of subpoenas. (History: Sec. 75-2-111, MCA; IMP Sec. 75-2-402, MCA; Eff. 12/31/72.)

16.8.404 HEARING (1) The alleged violator shall have the right to know and meet the evidence and arguments of the board, including the right to present evidence, oral argument

or both; and the right of cross-examination of witnesses.

(2) Not more than twenty-four (24) hours after the commencement of the hearing, and without adjournment thereof, and with the presence or absence of the alleged violator, the board shall affirm, modify, or set aside the order of the director. (History: Sec. 75-2-111 MCA, IMP, Sec. 75-2-402 MCA, Eff. 12/31/72.)

#### Sub-Chapter 5

#### Ambient Air Quality Standard Rule Procedures

16.8.501 PROCEDURES FOR HEARING ON PROPOSED AMBIENT AIR QUALITY STANDARDS IS REPEALED (History: Sec. 75-2-111 MCA, IMP, Sec. 75-2-202 MCA, NEW, 1978 MAR p. 1459, Eff. 1/26/79, AMD, 1979 MAR p. 319, Eff. 3/30/79, REP, 1981 MAR p. 556, Eff. 6/12/81.)

Sub-Chapter 6 reserved

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## Sub-Chapter 7

## General Provisions

16.8.701 DEFINITIONS As used in this and subsequent sub-chapters, unless indicated otherwise, the following definitions apply:

(1) "Ambient air" means that portion of the atmosphere, external to buildings, to which the general public has access.

(2) "Ambient air monitoring" means measurement of any air contaminant, odor, meteorological or atmospheric characteristic, or any physical or biological condition resulting from the effects of air contaminants or meteorological atmospheric conditions provided the measurement is performed in an area constituting ambient air.

(3) "Animal matter" means any product or derivative of animal life.

(4) "Control equipment" means any device or contrivance which prevents or reduces emissions.

(5) "Control officer" means the director or the administrator, or any employee of the department designated by the administrator, or any local health officer or employee designated by the administrator.

(6) "Food service establishment" means any fixed or mobile restaurant; coffee shop; cafeteria; short-order cafe; luncheonette; grill; tea-room; sandwich shop; soda fountain; tavern; bar; cocktail lounge; night club; roadside stand; private, public or nonprofit organization or institution routinely serving food; catering kitchen, commissary, or similar place in which food or drink is placed for sale or for service on the premises or elsewhere; and any other eating or drinking establishment or operation where food is served or provided for the public with or without charge.

(7) "Fuel burning equipment" means any furnace, boiler apparatus, stack, or appurtenances thereto used in the process of burning fuel or other combustible material for the primary purpose of producing heat or power by indirect heat transfer.

(8) "Incinerator" means any equipment, device or contrivance used for the destruction of garbage, rubbish or other wastes by burning, but not wood wastes burned in devices commonly called teepee burners, silos, truncated cones, wigwam burners or other such burners used commonly by the wood products industries and not including barrels, baskets or other contrivances commonly termed backyard trash burners, trash barrels or ash pits.

(9) "Installation" means any property, real or personal, including, but not limited to, processing equipment, manufacturing equipment, or construction, capable of creating or causing emissions.

(10) "Multiple chamber incinerator" means any article, machine, equipment, contrivance, structure or part of a structure used to dispose of combustible refuse by burning, consisting of three or more refractory lined combustion furnaces in series physically separated by refractory walls, interconnected by gas passage ports or ducts and employing adequate parameters necessary for maximum combustion of the material to be burned.

(11) "Odor" means that property of an emission which stimulates the sense of smell.

(12) "Opacity" means the degree, expressed in percent, to which emissions reduce the transmission of light and obscure the view of an object in the background. Where the presence of uncombined water is the only reason for failure of an emission to meet an applicable opacity limitation contained in this chapter, that limitation shall not apply. For the purpose of this chapter, opacity determination shall follow all requirements, procedures, specifications, and guidelines contained in 40 CFR Part 60, Appendix A, method 9 (July 1, 1987 ed.), or by an in-stack transmissometer which complies with all requirements, procedures, specifications and guidelines contained in 40 CFR Part 60, Appendix B, performance specification 1 (July 1, 1987 ed.).

(13) "Particulate matter" means any material, except water in uncombined form that is or has been airborne, and exists as a liquid or a solid at standard conditions.

(14) "Person" means any individual, partnership, firm, association, municipality, public or private corporation, subdivision or agency of the state, trust, estate or any other legal entity.

(15) "PM-10" means particulate matter with an aerodynamic diameter of less than or equal to a nominal 10 micrometers as measured by a reference method based on 40 CFR Part 50, Appendix J, (52 FR 24664, July 1, 1987) and designated in accordance with 40 CFR Part 53 (52 FR 24727, July 1, 1987), or by an equivalent method designated in accordance with 40 CFR Part 53 (52 FR 24727, July 1, 1987).

(16) "PM-10 emissions" means finely divided solid or liquid material, with an aerodynamic diameter less than or equal to a nominal 10 micrometers emitted to the ambient air as measured by an applicable reference method or alternative method as specified in Appendix C of the PM-10 SIP development guideline manual entitled, "Guidelines for Source Testing for Size Specific Particulate Emissions" or by a test method approved by the department.

(17) "Premises" means any property, piece of land or real estate or building.

(18) "Process weight" means the total weight of all materials introduced into any specific process which may cause



emissions. Solid fuels charged will be considered as part of the process weight, but liquid and gaseous fuels and combustion air will not.

(19) "Process weight rate" means the rate established as follows:

(a) For continuous or long-run steady-state operations, the total process weight for the entire period of continuous operation or for a typical portion thereof, divided by the number of hours of such period or portion thereof.

(b) For cyclical or batch operations, the total process weight for a period that covers a complete operation or an integral number of cycles, divided by the hours of actual process operation during such a period. Where the nature of any process or operation or the design of any equipment is such as to permit more than one interpretation of this definition, the interpretation that results in the minimum value for allowable emission shall apply.

(20) "Public nuisance" means any condition of the atmosphere beyond the property line of the offending person which:

(a) affects, at the same time, an entire community or neighborhood, or any considerable number of persons (although the extent of the annoyance or damage inflicted upon individuals may be unequal), and

(b) is injurious to health, or offensive to the senses, or which causes or constitutes an obstruction to the free use of property, so as to interfere with the comfortable enjoyment of life or property.

(21) "Reduction" means any heated process, including rendering, cooking, drying, dehydrating, digesting, evaporating, and protein concentrating.

(22) "Salvage operation" means any operation conducted in whole or in part for the salvaging or reclaiming of any product or material.

(23) "Source" means any property, real or personal, or person contributing to air pollution.

(24) "Stack or chimney" means any flue, conduit or duct arranged to conduct emissions.

(25) "Standard conditions" means a temperature of 70° Fahrenheit and pressure reduced to 29.92 inches of mercury at sea level.

(26) "Total suspended particulate" means particulate matter as measured by the method described in 40 CFR Part 50, Appendix B (July 1, 1987 ed.).

(27) "Wood waste burner" means a device commonly called a teepee burner, silo, truncated cone, wigwam burner, or other similar burner commonly used by the wood products industry for the disposal of wood.

(28) The definitions contained in section 75-2-103, MCA, shall be applicable where appropriate.

(29) The department hereby adopts and incorporates herein by reference the following sections of the federal regulations:

(a) 40 CFR Part 60, Appendix A, Test Method 9 (July 1, 1987 ed.), which sets forth a method for visual determination of the opacity of emissions from stationary sources;

(b) 40 CFR Part 50, Appendix J (52 FR 24664, July 1, 1987), which contains reference methods for the determination of particulate matter as PM-10 in the atmosphere;

(c) 40 CFR Part 53 (52 FR 24727, July 1, 1987), which pertains to ambient air monitoring reference methods and equivalent methods;

(d) Appendix C of the PM-10 SIP development guideline manual entitled, "Guidelines for Source Testing for Size Specific Particulate Emissions", which pertains to alternative methods for testing PM-10 emissions; and

(e) 40 CFR Part 50, Appendix B (July 1, 1987 ed.), which contains the reference method for the determination of suspended particulate matter in the atmosphere (high-volume method).

(f) A copy of the above sections is available for public inspection and copying at the Air Quality Bureau, Department of Health and Environmental Sciences, Cogswell Building, 1400 Broadway, Helena, Montana 59620; or from EPA's Public Information Reference Unit, 401 M Street SW, Washington, DC 20460. (History: Sec. 75-2-111, MCA; IMP, Title 75, chapter 2, MCA, Eff. 12/31/71; AMD, 1978 MAR p. 1727, Eff. 12/29/78; AMD, 1982 MAR p. 697, Eff. 4/16/82; AMD, 1985 MAR p. 1326, Eff. 9/13/85; AMD, 1986 MAR p. 2007, Eff. 12/12/86; AMD, 1988 MAR p. 826, Eff. 4/29/88.)

Rules 16.8.702 and 16.8.703 reserved

16.8.704 TESTING REQUIREMENTS (1) Any person or persons responsible for the emission of any air contaminant into the outdoor atmosphere shall upon written request of the department provide the facilities and necessary equipment including instruments and sensing devices and shall conduct tests, emission or ambient, for such periods of time as may be necessary using methods approved by the department. Such emission or ambient tests shall include, but not be limited to, a determination of the nature, extent, and quantity of air contaminants which are emitted as a result of such operation at all sampling points designated by the department. These data shall be maintained for a period of not less than one year and shall be available for review by the department. Such testing and sampling facilities may be either permanent or temporary at the discretion of the person responsible for their provision, and shall conform to all applicable laws and regulations concerning safe construction or safe practice.

(2) All sources subject to the requirements of 40 CFR Part 51 Appendix P must install, calibrate, maintain, and operate equipment for continuously monitoring and recording emissions. All subject sources must have installed all necessary equipment and shall have begun monitoring and recording emissions data in accordance with Appendix P by January 31, 1988.

(3) The board hereby adopts and incorporates by reference 40 CFR Part 51 Appendix P, which is a federal agency regulation setting forth the continuous emission monitoring requirements for existing major stationary sources. A copy of 40 CFR Part 51 Appendix P may be obtained from the Air Quality Bureau, Department of Health and Environmental Sciences, Cogswell Building, Capitol Station, Helena, Montana 59620. (History: Sec. 75-2-111, 75-2-203, MCA; IMP, Sec. 75-2-203, MCA, Eff. 12/31/72; AMD, 1987 MAR p. 159, Eff. 2/14/87.)

16.8.705 MALFUNCTIONS (1) "Malfunction" means any sudden and unavoidable failure of air pollution control equipment or process equipment, or a process when it affects emissions, to operate in a normal manner. A failure caused entirely or in part by poor maintenance, careless operation, poor design, or any other preventable upset condition or preventable equipment breakdown is not a malfunction.

(2) The air quality bureau of the department must be notified promptly by phone (406-444-3454) whenever a malfunction occurs that can be expected to create emissions in excess of any applicable emission limitation, or to continue for a period greater than 4 hours. If telephone notification is not immediately possible, notification at the beginning of the next working day is acceptable. The notification must include the following information:

(a) identification of the emission points and equipment



causing the excess emissions;

(b) magnitude, nature, and cause of the excess emissions;

(c) time and duration of the excess emissions;

(d) description of the corrective actions taken to remedy the malfunction and to limit the excess emissions;

(e) documentation that the air pollution control equipment, process equipment, or processes were at all times maintained and operated to the maximum extent practicable in a manner consistent with good practice for minimizing emissions;

(f) readings from any continuous emission monitor on the emission point and readings from any ambient monitors near the emission point.

(3) Upon receipt of notification pursuant to section (2) above, the department shall promptly investigate and determine whether a malfunction has occurred.

(4) If a malfunction occurs and creates emissions in excess of any applicable emission limitation, the department may elect to take no enforcement action if:

(a) the owner or operator of the source submits the notification required by section (2) above,

(b) the malfunction does not interfere with the attainment and maintenance of any state or federal ambient air quality standards, and

(c) the owner or operator of the source immediately undertakes appropriate corrective measures.

(5) Within one week after a malfunction has been corrected, the owner or operator must submit a written report to the department which includes:

(a) a statement that the malfunction has been corrected, the date of correction, and proof of compliance with all applicable air quality standards contained in this chapter;

(b) a specific statement of the causes of the malfunction; and

(c) a description of the preventive measures undertaken and/or to be undertaken to avoid such a malfunction in the future.

(6) The burden of proof is on the owner or operator of the source to provide sufficient information to demonstrate that a malfunction did occur.

(7) No person may falsely claim a malfunction has occurred or submit to the department information, pursuant to this rule, which is false. (History: Sec. 75-2-111, 75-2-203 MCA; IMP, Sec. 75-2-203 MCA; NEW, 1982 MAR p. 1201, Eff. 6/18/82.)

16.8.706 MALFUNCTIONS IS REPEALED (History: Sec. 75-2-111, 75-2-203, MCA; IMP, Sec. 75-2-203, MCA, Eff. 12/31/72; AMD, Eff. 9/5/75; REP, 1982 MAR p. 1201, Eff. 6/18/82.)

16.8.707 CIRCUMVENTION (1) No person shall cause or permit the installation or use of any device or any means which, without resulting in reduction in the total amount of air contaminant emitted, conceals or dilutes an emission of air contaminant which would otherwise violate an air pollution control regulation.

(2) No equipment that may produce emissions shall be operated or maintained in such a manner that a public nuisance is created. (History: Sec. 75-2-111, 75-2-203, MCA; IMP, Sec. 75-2-203, MCA, Eff. 12/31/72; AMD, 1985 MAR p. 1326, Eff. 9/13/85.)

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16.8.705 MALFUNCTIONS (1) "Malfunction" means any sudden and unavoidable failure of air pollution control equipment or process equipment, or a process when it affects emissions, to operate in a normal manner. A failure caused entirely or in part by poor maintenance, careless operation, poor design, or any other preventable upset condition or preventable equipment breakdown is not a malfunction.

(2) The air quality bureau of the department must be notified promptly by phone (406-444-3454) whenever a malfunction occurs that can be expected to create emissions in excess of any applicable emission limitation, or to continue for a period greater than 4 hours. If telephone notification is not immediately possible, notification at the beginning of the next working day is acceptable. The notification must include the following information:

(a) identification of the emission points and equipment causing the excess emissions;

(b) magnitude, nature, and cause of the excess emissions;

(c) time and duration of the excess emissions;

(d) description of the corrective actions taken to remedy the malfunction and to limit the excess emissions;

(e) documentation that the air pollution control equipment, process equipment, or processes were at all times maintained and operated to the maximum extent practicable in a manner consistent with good practice for minimizing emissions;

(f) readings from any continuous emission monitor on the emission point and readings from any ambient monitors near the emission point.

(3) Upon receipt of notification pursuant to section (2) above, the department shall promptly investigate and determine whether a malfunction has occurred.

(4) If a malfunction occurs and creates emissions in excess of any applicable emission limitation, the department may elect to take no enforcement action if:

(a) the owner or operator of the source submits the notification required by section (2) above,

(b) the malfunction does not interfere with the attainment and maintenance of any state or federal ambient air quality standards, and



(c) the owner or operator of the source immediately undertakes appropriate corrective measures.

(5) Within one week after a malfunction has been corrected, the owner or operator must submit a written report to the department which includes:

(a) a statement that the malfunction has been corrected, the date of correction, and proof of compliance with all applicable air quality standards contained in this chapter;

(b) a specific statement of the causes of the malfunction; and

(c) a description of the preventive measures undertaken and/or to be undertaken to avoid such a malfunction in the future.

(6) The burden of proof is on the owner or operator of the source to provide sufficient information to demonstrate that a malfunction did occur.

(7) No person may falsely claim a malfunction has occurred or submit to the department information, pursuant to this rule, which is false. (History: Sec. 75-2-111, 75-2-203 MCA; IMP, Sec. 75-2-203 MCA; NEW, 1982 MAR p. 1201, Eff. 6/18/82.)

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(2) No equipment that may produce emissions shall be operated or maintained in such a manner that a public nuisance is created. (History: Sec. 75-2-111, 75-2-203, MCA; IMP, Sec. 75-2-203, MCA; Eff. 12/31/72; AMD, 1985 MAR p. 1326, Eff. 9/13/85.)

## Sub-Chapter 8

## Ambient Air Quality

16.8.801 BOARD POLICY IS REPEALED (History: Sec. 75-2-111, 75-2-202 MCA; IMP, Sec. 75-2-202 MCA; Eff. 12/31/72; REP, 1980 MAR p. 2399, Eff. 8/15/80.)

Rule 16.8.802 reserved

16.8.803 STANDARDS IS REPEALED (History: Sec. 75-2-111, 75-2-202 MCA; IMP, Sec. 75-2-202 MCA; Eff. 12/31/72; REP, 1980 MAR p. 2399, Eff. 8/15/80.)

16.8.804 SAMPLING AND ANALYTICAL PROCEDURES IS REPEALED (History: Sec. 75-2-111, 75-2-202, MCA; IMP, Sec. 75-2-202, MCA; Eff. 12/31/72; REP, 1980 MAR p. 2399, Eff. 8/15/80.)

16.8.805 PURPOSE In accordance with section 75-2-102, MCA, of the Montana Clean Air Act, it is the primary purpose of this subchapter to establish ambient air quality standards which protect human health and safety, and to the greatest degree practicable, prevent injury to plant and animal life and property, foster the comfort and convenience of the people, promote the economic and social development of this state, and facilitate the enjoyment of the natural attractions of this state. (History: Sec. 75-2-111, 75-2-202 MCA; IMP, Sec. 75-2-202 MCA; NEW, 1980 MAR p. 2399, Eff. 8/15/80.)

16.8.806 DEFINITIONS In this subchapter, the following words and phrases shall have the following meanings:

(1) "Act" means the Montana Clean Air Act.

(2) "Ambient air quality standards" means a permissible level of an air contaminant in the ambient air as defined by the maximum frequency with which a specified level may be exceeded or by a maximum level of an air contaminant in or on body or plant tissues.

(3) "Annual average" means an arithmetic average of any four consecutive valid calendar quarterly averages, where calendar quarterly averages are determined as specified in (a) and (b) below; except that for hourly data at least 6,570 valid hourly averages must be contained in the four consecutive calendar quarters.

(a) For hourly data, the calendar quarterly average is the arithmetic average of all valid hourly averages collected during the quarter, except that the minimum number of valid hourly averages necessary to determine a valid quarterly average is 65 percent of the hourly averages contained in the quarter.

## Sub-Chapter 8

## Ambient Air Quality

16.8.801 BOARD POLICY IS REPEALED (History: Sec. 75-2-111, 75-2-202 MCA; IMP, Sec. 75-2-202 MCA, Eff. 12/31/72; REP, 1980 MAR p. 2399, Eff. 8/15/80.)

Rule 16.8.802 reserved

16.8.803 STANDARDS IS REPEALED (History: Sec. 75-2-111, 75-2-202 MCA; IMP, Sec. 75-2-202 MCA, Eff. 12/31/72; REP, 1980 MAR p. 2399, Eff. 8/15/80.)

16.8.804 SAMPLING AND ANALYTICAL PROCEDURES IS REPEALED (History: Sec. 75-2-111, 75-2-202, MCA; IMP, Sec. 75-2-202, MCA, Eff. 12/31/72; REP, 1980 MAR p. 2399, Eff. 8/15/80.)

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16.8.806 DEFINITIONS In this subchapter, the following words and phrases shall have the following meanings:

- (1) "Act" means the Montana Clean Air Act.
- (2) "Ambient air quality standards" means a permissible level of an air contaminant in the ambient air as defined by the maximum frequency with which a specified level may be exceeded or by a maximum level of an air contaminant in or on body or plant tissues.
- (3) "Annual average" means an arithmetic average of any four consecutive valid calendar quarterly averages, where calendar quarterly averages are determined as specified in (a) and (b) below; except that for hourly data at least 6,570 valid hourly averages must be contained in the four consecutive calendar quarters.
  - (a) For hourly data, the calendar quarterly average is the arithmetic average of all valid hourly averages collected during the quarter, except that the minimum number of valid hourly averages necessary to determine a valid quarterly average is 65 percent of the hourly averages contained in the quarter.



(b) For twenty-four hour data, the calendar quarterly average is the arithmetic average of all valid interval averages, except that the minimum number of valid interval averages necessary to determine a valid quarterly average is 80 percent of the interval averages contained in the quarter.

(4) "Approved equivalent method" means any method of measuring concentrations of air contaminants regulated in this subchapter which has been approved as an equivalent method by the U.S. Environmental Protection Agency pursuant to Title 40, Part 53, Code of Federal Regulations or which has been approved by the department. Methods approved by the department are kept on file and are available for inspection and copying.

(5) "Carbon monoxide" means the gas having the molecular composition of one carbon atom and one oxygen atom.

(6) "Department" means the department of health and environmental sciences.

(7) "Eight hour average" means the arithmetic average of all valid recorded values during any consecutive eight hours but not less than six valid hourly averages.

(8) "Fluoride" means fluorine combined with one or more other substances.

(9) "Forage" means any plant part which is grazed or browsed.

(10) "Grams per square meter" (gm/m<sup>2</sup>) means a concentration numerically equal to the mass of an air contaminant (in grams) deposited on one square meter of surface.

(11) "Grazing season average" means, for each sample plot, an arithmetic average of all monthly averages for which sampling occurred in accordance with ARM 16.8.813. The minimum number of monthly averages shall be at least three for any sample plot.

(12) "Hourly average" means an arithmetic average of all valid values recorded between the first minute and sixtieth minute of the hour (e.g. 1:00 to 2:00), but not less than two-thirds of the data obtainable from the monitoring device during the hour, or an integral sample of more than 40 minutes.

(13) "Hydrogen fluoride" means the gas having the molecular composition of one fluorine atom and one hydrogen atom.

(14) "Hydrogen sulfide" means the gas having molecular composition of one sulfur atom and two hydrogen atoms.

(15) "Interval average" means the arithmetic average of all valid twenty-four hour averages collected during a specific scheduled sampling interval, except that the minimum number of valid twenty-four hour averages necessary to determine a valid interval average is one. If a scheduled sampling interval extends into two calendar quarters or two ninety-day averaging periods the interval average shall be assigned to the calendar quarter or ninety-day averaging period containing the start date of the interval.

(16) "Lead" means elemental lead or lead in combination with any other substance.

(17) "Micrograms per cubic meter" ( $\mu\text{g}/\text{m}^3$ ) means a concentration numerically equal to the mass of an air contaminant present (in micrograms) in a one cubic meter of air, corrected to standard conditions.

(18) "Micrograms per gram" ( $\mu\text{g}/\text{g}$ ) means a concentration numerically equal to the mass of an air contaminant (in micrograms) in one gram of dry material.

(19) "Monthly average" means the arithmetic average for a sample plot, taken for all applicable months in accordance with ARM 16.8.813 of all sample plot values of fluoride in or on forage samples collected. The minimum number of sample plot values must be two. The two sample plot values must be separated by at least a 12-day interval. Any number of sample plot values in excess of two for any month must be sampled at least X days from each other, where X is the integer value described by the following equation:

$$X = (30/\text{Number of Sample Plot Values}) - 2$$

Regardless of the number of sample plot values used to calculate a monthly average, at least one sample plot value must lie within 12 days of the end of the month.

(20) "Ninety day average" means the arithmetic average of all valid interval averages recorded during any 90 consecutive days except that the minimum number of valid interval averages necessary to determine a valid ninety-day average is 80 percent of the interval averages contained in the 90 days.

(21) "Nitrogen dioxide" means the gas having the molecular composition of one nitrogen atom and two oxygen atoms.

(22) "Ozone" means the gas having the molecular composition of three oxygen atoms.

(23) "Particle scattering coefficient" means the fractional change in the light intensity per meter of sight path due to particulate matter.

(24) "Parts per billion" (ppb) means a concentration of an air contaminant numerically equal to the volume of a gaseous air contaminant present in 1 billion volumes of air at the same conditions of temperature and pressure.

(25) "Parts per million" (ppm) means a concentration of an air contaminant numerically equal to the volume of a gaseous air contaminant present in 1 million volumes of air at the same conditions of temperature and pressure.

(26) "Sample plot value" means the results of any chemical analysis performed on a composite of forage clippings taken from a given sample plot on a specific sampling day.

(27) "Scheduled sampling interval" means the time period commencing with the start of one scheduled sampling day and ending at the start of the next scheduled sampling day, where "scheduled" means a predetermined routine sampling frequency.

If the sampling schedule is changed during any calendar quarter or ninety-day averaging period the scheduled sampling interval shall be the largest possible time period based on any of the sampling schedules.

(28) "Standard conditions" means a temperature of 25° Celsius and a pressure of 760 millimeters of mercury.

(29) "Sulfur dioxide" means the gas having the molecular composition of one sulfur atom and two oxygen atoms.

(30) "Thirty-day average" means an arithmetic average of all recorded values during any consecutive 30 days, but not less than 20 valid 24 hour average recorded values or an integral sample of more than 20 days.

(31) "Twenty-four hour average" means an arithmetic average of each valid recorded value during any consecutive 24 hours, but not less than 18 valid hourly averages or an integral sample of more than 18 hours.

(32) "Valid recorded value" means data recorded, collected, transmitted and analyzed as required by ARM 16.8.811.

(33) "Year" means any 12 consecutive months. (History: Sec. 75-2-111, 75-2-202, MCA; IMP, Sec. 75-2-202, MCA; NEW, 1980 MAR p. 2399, Eff. 8/15/80; AMD, 1981 MAR p. 847, Eff. 8/14/81; AMD, 1986 MAR p. 2007, Eff. 12/12/86; AMD, 1988 MAR p. 826, Eff. 4/29/88.)

16.8.807 AMBIENT AIR MONITORING (1) The requirements of this rule apply to any ambient air monitoring performed by the department or any other entity as required by this chapter, including any ambient air monitoring performed as a result of any condition of any permit issued under subchapters 9 or 11 regardless of the date of issuance, or any other ambient air monitoring by any entity in order to determine compliance with subchapter 8 or 9.

(2) Except as otherwise provided in this chapter, or unless written approval is obtained from the department for an exemption from a specific part of the Montana Quality Assurance Manual (Sept. 1986 ed.), all sampling and data collection, recording, analysis, and transmittal, including but not limited to site selection, precision and accuracy determinations, data validation procedures and criteria, preventive maintenance, equipment repairs, and equipment selection must be performed as specified in the Montana Quality Assurance Manual (Sept. 1986 ed.) except when more stringent requirements are determined by the department to be necessary pursuant to the U.S. Environmental Protection Agency Quality Assurance Manual (EPA-600/9-76-005, revised Dec. 1984 Vol. I; EPA-600/4-77-027a, revised Jan. 1983, Vol. II; EPA-600/4-77-027b, revised Jan. 1982, Vol. III; and EPA-600/4-82-060, Feb. 1983, Vol. IV), or 40 CFR, Part 50 including appendices A through E, Part 53 including appendix A, and Part 58 including appendices A through G, at which time the



latter two documents shall be adhered to for the specific exception.

(3) Failure to comply with this rule is grounds to partially or totally invalidate the appropriate ambient air monitoring data which subsequently could result in:

(a) a violation of the conditions of a permit issued under subchapters 9 or 11; or

(b) a determination by the department that a permit application submitted under subchapters 9 or 11 is incomplete; or

(c) a determination that insufficient ambient air quality data is available to determine compliance with any ambient air quality standard contained in subchapter 8 or a prevention of significant deterioration increment contained in ARM 16.8.925.

(4) The board hereby adopts and incorporates by reference the Montana Quality Assurance Manual (Sept. 1986 ed.) and the U.S. Environmental Protection Agency Quality Assurance Manual (EPA-600/9-76-005, revised Dec. 1984, Vol. I; EPA-600/4-77-027a, revised Jan. 1983, Vol. II; EPA-600/4-77-027b, revised Jan. 1982, Vol. III; and EPA-600/4-82-060, Feb. 1983, Vol. IV) and 40 CFR Part 50 including Appendices A through E, Part 53 including Appendix A, and Part 58 including Appendices A through G, which are state and federal agency manuals and regulations setting forth sampling and data collection, recording, analysis and transmittal requirements. A copy of these materials may be obtained from the Air Quality Bureau, Department of Health and Environmental Sciences, Cogswell Building, Capitol Station, Helena, Montana 59620. (History: Sec. 75-2-111, MCA; IMP, Sec. 75-2-201, 75-2-202, MCA; NEW, 1986 MAR p. 2007, Eff. 12/12/86.)

16.8.808 ENFORCEABILITY Any person who violates any provision of this subchapter shall be subject to the enforcement provisions of the act. Except as otherwise provided in this subchapter, the ambient air quality standards are applicable throughout the state of Montana. (History: Sec. 75-2-111, 75-2-202 MCA; IMP, Sec. 75-2-202 MCA; NEW, 1980 MAR p. 2399, Eff. 8/15/80.)

16.8.809 METHODS AND DATA (1) Except as otherwise provided in this subchapter or unless written approval is obtained from the department for an exemption from a specific part of the Montana Quality Assurance Manual (Sept. 1986 ed.), all sampling and data collection, recording, analysis and transmittal, including but not limited to site selection, calibrations, precision and accuracy determinations must be performed as specified in the Montana Quality Assurance Manual (Sept. 1986 ed.) except when more stringent requirements are contained in the U.S. Environmental Protection Agency Quality

Assurance Manual (EPA-600/9-76-005, revised Dec. 1984, Vol. I; EPA-600/4-77-027a, revised Jan. 1983, Vol. II; EPA-600/4-77-027b, revised Jan. 1982, Vol. III; and EPA-600/4-82-060, Feb. 1983, Vol. IV) or 40 CFR, Part 50 including appendices A through E, Part 53 including appendix A, and Part 58 including appendices A through G. Any valid recorded value at any one monitoring device which exceeds the applicable ambient air quality standard shall constitute an exceedance at that monitoring location but not at any other monitoring location and permitted exceedances shall be applicable to each monitoring location. If a valid recorded value comprises in whole or in part an exceedance of an ambient air quality standard, such recorded value shall not comprise in whole or in part a second exceedance of the same ambient air quality standard.

(2) The board hereby adopts and incorporates by reference the Montana Quality Assurance Manual (Sept. 1986 ed.) and the U.S. Environmental Protection Agency Quality Assurance Manual (EPA-600/9-76-005, revised Dec. 1984, Vol. I; EPA-600/4-77-027a, revised Jan. 1983, Vol. II; EPA-600/4-77-027b, revised Jan. 1982, Vol. III; and EPA-600/4-82-060, Feb. 1983, Vol. IV) and 40 CFR Part 50 including Appendices A through E, Part 53 including Appendix A, and Part 58 including Appendices A through G, which are state and federal agency manuals and regulations setting forth sampling and data collection, recording, analysis and transmittal requirements. A copy of these materials may be obtained from the Air Quality Bureau, Department of Health and Environmental Sciences, Cogswell Building, Capitol Station, Helena, Montana 59620. (History: Sec. 75-2-111, 75-2-202 MCA; IMP, Sec. 75-2-202 MCA; NEW, 1980 MAR p. 2399, Eff. 8/15/80; AMD, 1986 MAR p. 2007, Eff. 12/12/86.)

16.8.810 PROCEDURES FOR REVIEWING AND REVISING THE MONTANA QUALITY ASSURANCE MANUAL (1) The department shall review the Montana Quality Assurance Manual at least biennially and determine if any changes or revisions are necessary to assure that all ambient monitoring data to be collected and summarized as required under this chapter is of sufficient quality, representativeness, and completeness to meet the monitoring objectives of this chapter.

(2) If, upon completion of the review described in section (1) above, the department determines that changes or a revision are necessary, the department shall prepare a draft revision to the Montana Quality Assurance Manual and, upon completion, notify interested parties that copies of the draft revision will be available for review at the Montana Air Quality Bureau, Cogswell Building, Helena, Montana 59620, or if requested, the department will mail a copy to an interested party at a reasonable charge. The department shall accept comments on the draft revision for 60 days after the notification date.

(3) The department shall review the comments received in accordance with section (2) above and, after considering the need for quality ambient air monitoring data, shall prepare any appropriate revisions to the Montana Quality Assurance Manual and a schedule of when the revision or parts of the revision become effective. (After considering the availability of the equipment and supplies necessary to comply with the revision as well as the economic impact on the organizations conducting the ambient air monitoring, the department may include different effective dates for specific parts of the revision and for specific categories of ambient air monitoring programs, such as existing, proposed, gaseous, particulate, meteorological, or any other identifiable category of the ambient air monitoring program.)

(4) Following the completion of the requirements of sections (1), (2), and (3) above, the department shall propose for board action any revisions to the Montana Quality Assurance Manual that are appropriate. (History: Sec. 75-2-111, MCA; IMP, Sec. 75-2-201, 75-2-202, MCA; NEW, 1986 MAR p. 2007, Eff. 12/12/86.)

16.8.811 AMBIENT AIR QUALITY STANDARDS FOR CARBON MONOXIDE (1) No person shall cause or contribute to concentrations of carbon monoxide in the ambient air which exceed any of the following standards:

(a) Hourly average: 23 parts per million, hourly average, not to be exceeded more than once per year.

(b) Eight-hour average: 9 parts per million, eight-hour average, not to be exceeded more than once per year.

(2) Measurement method: For determining compliance with this rule, carbon monoxide shall be measured by the non-dispersive infrared method, as more fully described in Title 40, Part 50 (Appendix C), Code of Federal Regulations (1979), or by an approved equivalent method. (History: Sec. 75-2-111, 75-2-202 MCA; IMP, Sec. 75-2-202 MCA; NEW, 1980 MAR p. 2399, Eff. 8/15/80.)

Rule 16.8.812 reserved

16.8.813 FLUORIDE IN FORAGE (1) No person may cause or contribute to concentrations of fluoride in or on forage which exceed the following standards:

(a) Monthly average: 50 micrograms per gram.

(b) Grazing season average: 35 micrograms per gram.

(2) The following sampling protocol must be applied:

(a) A sample plot must be located on an area which has forage being grazed by domestic livestock, or an area upon which forage is grown for use or commercial sale as a livestock feed. A sample plot must be located on a U.S. Geological Sur-



vey Map, or on an aerial photograph, for consistency of resampling. A written description of the plot location is acceptable, in the alternative, if the area can be verbally defined to the satisfaction of the department. Plot descriptions must be filed with the department's Air Quality Bureau on standard site identification forms provided by the department. The location of sample plots must be approved by the department.

(b) The sample plot must be a minimum of one acre in area. At locations where forage growth is sparse, the sample plot must be large enough to allow a sampling capability, which meets the provisions of sample number and size, as described in this protocol under subsection (e). Location of the plot must be chosen according to the predicted location of maximum fluoride impact. This location must be determined through modeling, historical monitoring data or other scientifically supportable procedures acceptable to the department. In the event that the predicted location of maximum concentration lies in an area unsuitable for sampling, another nearby plot suitable for sampling must be chosen. Locations where grasses are less than 3 cm in height or locations less than 100 meters from dirt roads or at locations less than 30 meters from paved roads must not be sampled.

(c) Sampling of each plot must be performed at least twice per month. The sampling schedule, if twice per month, must provide a minimum of 12 days between sampling periods. Should additional sampling be conducted, sampling intervals must be spaced in accordance with the definition of monthly average to represent the entire monthly forage fluoride uptake. Grazing season sampling must commence and terminate on the appropriate month following the constraints in subsections (2)(a) and (2)(f) of this rule.

(d) Samples must be collected through the sample period by alternately using S, U, W, S, U, W etc., shaped transects, which traverse the full sample plot. Samples must be collected at regularly spaced distances as one progresses along the transect. Regardless of the plot size, a minimum of 25 clippings per plot must be collected. Clippings collected at each plot must be placed into a single composite sample. Samples must not be washed or in any way treated to remove particulate material from the plant.

(e) Approximately equal-sized clippings of at least 10 grams each must be cut from the forage in a given sample plot. The entire aerial portion above 3 cm of the base of the plant must be collected, unless the splashline is clearly above the 3 cm mark, in which case the vegetation must be cut slightly above the splashline. The clipping must include old and new leaves. Entire leaves must be collected and analyzed rather than only leaf tips or edges. An attempt must be made whenever possible to obtain plant tissue that is free of dew or other

moisture.

(f) Only forage grasses must be sampled and only on sample plots on which livestock are actively grazing or sample plots on which forage is grown for use or commercial sale as livestock feed. In order to determine compliance with this rule, forage sampling must occur during months for which any livestock can obtain its minimum nutritional requirements by grazing the land. Sampling may not take place on forage grown for use or commercial sale as a livestock feed unless the sampling takes place during a month in which the forage is growing and the growth is expected to be harvested for use in livestock feeding.

(g) Plant tissue must be stored in the laboratory in labeled and ventilated kraft bags, or other acceptable containers, at temperatures of 2-8° C. The sample tissue must be air dried at a temperature of 80° C (9 5° C) for 24 to 48 hours prior to grinding. The tissue shall be milled to pass a 40-mesh sieve.

(h) The composite sample must be thoroughly mixed prior to any chemical analysis. Replicate aliquots are to be taken using a sample splitter or any other unbiased technique, and analyzed chemically for fluoride using the semi-automated method, as more fully described in Methods of Air Sampling and Analysis, Second Edition (1977), Method No. 122-2-02-68T, except that the surfaces of the plant material must not be washed, or by an approved equivalent method.

(i) A 5-gram replicate aliquot from each plot must be forwarded to the department for quality control purposes. Another aliquot of the collected plant material must be saved for a minimum of 3 years in labeled air-tight plastic containers in the event additional analyses are required.

(j) The department hereby adopts and incorporates herein by reference Methods of Air Sampling and Analysis, Second Edition (1977), Method No. 122-2-02-68T. Methods of Air Sampling and Analysis, Second Edition is a nationally recognized authority setting forth the laboratory analytic procedure for chemical analysis of plant tissue. A copy of Methods of Air Sampling and Analysis, Second Edition (1977), Method No. 122-2-02-68T may be obtained from the Air Quality Bureau, Department of Health and Environmental Sciences, Cogswell Building, Capitol Complex, Helena, Montana 59620. (History: Sec. 75-2-111, 75-2-202 MCA; IMP, Sec. 75-2-202 MCA; NEW, 1980 MAR p. 2399, Eff. 8/15/80; AMD, 1981 MAR p. 850, Eff. 8/14/81.)

16.8.814 AMBIENT AIR QUALITY STANDARD FOR HYDROGEN SULFIDE (1) No person shall cause or contribute to concentrations of hydrogen sulfide in the ambient air which exceed the following standard:

(a) Hourly average: 0.05 parts per million, 1-hour aver-

age, not to be exceeded more than once per year.

(2) Measurement method: For determining compliance with this rule, hydrogen sulfide shall be measured by the methylene blue spectrophotometric method, as more fully described in "Methods of Air Sampling and Analysis, Second Edition" (1977) Method P & CAM 126-6, or by an approved equivalent method. (History: Sec. 75-2-111, 75-2-202 MCA; IMP, Sec. 75-2-202 MCA; NEW, 1980 MAR p. 2399, Eff. 8/15/80.)

16.8.815 AMBIENT AIR QUALITY STANDARD FOR LEAD (1) No person shall cause or contribute to concentrations of lead in the ambient air which exceed the following standard:

(a) Ninety-day average: 1.5 micrograms per cubic meter of air, 90-day average, not to be exceeded.

(2) For determining compliance with this rule, lead shall be measured by the high-volume method as more fully described in 40 CFR Part 50, Appendix B, (July 1, 1987 ed.) and by the atomic absorption method as more fully described in 40 CFR Part 50, Appendix G, (July 1, 1987 ed.) or by an approved equivalent method.

(3) The department hereby adopts and incorporates herein by reference the following sections of the federal regulations:

(a) 40 CFR Part 50, Appendix B (July 1, 1987 ed.), which contains the reference method for the determination of suspended particulate matter in the atmosphere (high-volume method); and

(b) 40 CFR Part 50, Appendix G (July 1, 1987 ed.), which contains the reference method for the determination of lead in suspended particulate matter collected from ambient air.

(c) A copy of the above sections is available for public inspection and copying at the Air Quality Bureau, Department of Health and Environmental Sciences, Cogswell Building, 1400 Broadway, Helena, Montana 59620; or from EPA's Public Information Reference Unit, 401 M Street SW, Washington, DC 20460. (History: Sec. 75-2-111, 75-2-202, MCA; IMP, Sec. 75-2-202, MCA; NEW, 1980 MAR p. 2399, Eff. 8/15/80; AMD, 1988 MAR p. 826, Eff. 4/29/88.)

16.8.816 AMBIENT AIR QUALITY STANDARDS FOR NITROGEN DIOXIDE (1) No person shall cause or contribute to concentrations of nitrogen dioxide in the ambient air which exceed any of the following standards:

(a) Hourly average: 0.30 parts per million, 1-hour average, not to be exceeded more than once per year;

(b) Annual average: 0.05 parts per million, annual average, not to be exceeded.



(2) Measurement method: For determining compliance with this rule, nitrogen dioxide shall be measured by the chemiluminescence method, as more fully described in Title 40, Part 50, (Appendix F), Code of Federal Regulations (1979), or by an approved equivalent method. (History: Sec. 75-2-111, 75-2-202 MCA; IMP, Sec. 75-2-202 MCA; NEW, 1980 MAR p. 2399, Eff. 8/15/80.)

16.8.817 AMBIENT AIR QUALITY STANDARD FOR OZONE (1) No person shall cause or contribute to concentrations of ozone in the ambient air which exceed the following standard:

(a) Hourly average: 0.10 parts per million 1-hour average, not to be exceeded more than once per year.

(2) Measurement method: For determining compliance with this rule, ozone shall be measured by the chemiluminescence method, as more fully described in Title 40, Part 50 (Appendix D), Code of Federal Regulations (1979), or by an approved equivalent method. (History: Sec. 75-2-111, 75-2-202 MCA; IMP, Sec. 75-2-202 MCA; NEW, 1980 MAR p. 2399, Eff. 8/15/80.)

16.8.818 AMBIENT AIR QUALITY STANDARD FOR SETTLED PARTICULATE MATTER (1) No person shall cause or contribute to concentrations of particulate matter in the ambient air such that the mass of settled particulate matter exceeds the following standard:

(a) Thirty-day average: 10 grams per square meter, 30-day average, not to be exceeded.

(2) Measurement method: For determining compliance with this rule, settled particulate matter shall be measured by the dust fall method, as more fully described in "Methods of Air Sampling and Analysis, Second Edition" (1977), Method No. 21101-0170T, or by an approved equivalent method. (History: Sec. 75-2-111, 75-2-202 MCA; IMP, Sec. 75-2-202 MCA; NEW, 1980 MAR p. 2399, Eff. 8/15/80.)

Rule 16.8.819 reserved

16.8.820 AMBIENT AIR QUALITY STANDARDS FOR SULFUR DIOXIDE

(1) No person shall cause or contribute to concentrations of sulfur dioxide in the ambient air which exceed any of the following standards:

(a) Hourly average: 0.50 parts per million, 1-hour average, not to be exceeded more than 18 times in any twelve consecutive months;

(b) Twenty-four hour average: 0.10 parts per million, 24-hour average, not to be exceeded more than once per year, except that persons causing or contributing to ambient 24-hour average concentrations of sulfur dioxide that exceeded more than once 0.10 parts per million during 1985 must be considered

in compliance with this rule if ambient concentrations do not exceed 0.14 parts per million more than once per year;

(c) Annual average: 0.02 parts per million, annual average, not to be exceeded, except that persons causing or contributing to ambient annual concentrations of sulfur dioxide that exceeded 0.02 parts per million during 1985 must be considered in compliance with this rule if ambient concentrations do not exceed 0.03 parts per million.

(2) Measurement method: For determining compliance with this rule, sulfur dioxide shall be measured by the pararosaniline method as more fully described in Title 40, Part 50 (Appendix A) Code of Federal Regulations (1979), or by an approved equivalent method. (History: Sec. 75-2-111, 75-2-202 MCA; IMP, Sec. 75-2-202 MCA; NEW, 1980 MAR p. 2399, Eff. 8/15/80; AMD, 1987 MAR p. 1482, Eff. 8/28/87.)

16.8.821 AMBIENT AIR QUALITY STANDARD FOR PM-10

(1) No person may cause or contribute to concentrations of PM-10 in the ambient air which exceed the following standards:

(a) Twenty-four hour average: 150 micrograms per cubic meter of air, 24-hour average, with no more than one expected exceedance per calendar year.

(b) Annual average: 50 micrograms per cubic meter of air, expected annual average, not to be exceeded.

(2) For the purpose of this rule, expected exceedance and expected annual average shall be determined in accordance with 40 CFR Part 50, Appendix K (52 FR 24667, July 1, 1987).

(3) For determining compliance with this rule, PM-10 shall be measured by an applicable reference method based on 40 CFR Part 50, Appendix J (52 FR 24664, July 1, 1987), and designated in accordance with 40 CFR Part 53 (52 FR 24727, July 1, 1987) or by an equivalent method designated in accordance with 40 CFR Part 53 (July 1, 1987 ed.).

(4) The department hereby adopts and incorporates herein by reference the following sections of the federal regulations:

(a) 40 CFR Part 50, Appendix J (52 FR 24664, July 1, 1987), which contains reference methods for the determination of particulate matter as PM-10 in the atmosphere;

(b) 40 CFR Part 50, Appendix K (52 FR 24667, July 1, 1987), which contains an interpretation of national ambient air quality standards for particulate matter; and

(c) 40 CFR Part 53 (52 FR 24727, July 1, 1987), which pertains to ambient air monitoring reference methods and equivalent methods.

(d) A copy of the above sections is available for public inspection and copying at the Air Quality Bureau, Department of Health and Environmental Sciences, Cogswell Building, 1400 Broadway, Helena, Montana 59620; or from EPA's Public Informa-

tion Reference Unit, 401 M Street SW, Washington, DC 20460. (History: Sec. 75-2-111, 75-2-202, MCA; IMP, Sec. 75-2-202, MCA; NEW, 1980 MAR p. 2399, Eff. 8/15/80; AMD, 1988 MAR p. 826, Eff. 4/29/88.)

16.8.822 AMBIENT AIR QUALITY STANDARD FOR VISIBILITY

(1) No person shall cause or contribute to concentrations of particulate matter such that the scattering coefficient of particulate matter in the ambient air exceeds the following standard:

(a) Annual average:  $3 \times 10^{-5}$  per meter, annual average, not to be exceeded.

(2) The provisions of section (1) are applicable only in Class I areas as are designated under the Montana Clean Air Act rules, Prevention of Significant Deterioration, (Title 16, chapter 8, subchapter 9, ARM) on the effective date of this rule. Areas redesignated Class I subsequent to the effective date of this rule shall be subject to the provisions of section (1) only upon a finding by the board that visibility is an important attribute of such area.

(3) Measurement method: For determining compliance with this rule, visibility shall be measured by the integrating nephelometer method, as more fully described in "Methods of Air Sampling and Analysis, Second Edition" (1977) Method No. 11203-03-76T, as modified by the addition of a heated sample inlet line and green spectral sensitivity; or by an approved equivalent method. (History: Sec. 75-2-111, 75-2-202 MCA; IMP, Sec. 75-2-202 MCA; NEW, 1980 MAR p. 2399, Eff. 8/15/80.)





## Sub-Chapter 9

## Prevention of Significant Deterioration of Air Quality

16.8.901 DEFINITIONS IS REPEALED (History: Sec. 75-2-111, 75-2-203, MCA; IMP Sec. 75-2-202, 75-2-203, MCA; NEW, 1979 MAR p. 242, Eff. 3/16/79; REP, 1983 MAR p. 71, Eff. 1/28/83.)

16.8.902 REDESIGNATION IS REPEALED (History: Sec. 75-2-111, 75-2-203 MCA; IMP, Sec. 75-2-202, 75-2-203, MCA; NEW, 1979 MAR p. 242, Eff. 3/16/79; REP, 1983 MAR p. 71, Eff. 1/28/83.)

Rule 16.8.903 reserved

16.8.904 AMBIENT AIR INCREMENTS IS REPEALED (History: Sec. 75-2-111, 75-2-203, MCA; IMP Sec. 75-2-202, 75-2-203, MCA; NEW, 1979 MAR p. 242, Eff. 3/16/79; REP, 1983 MAR p. 71, Eff. 1/28/83.)

16.8.905 AMBIENT AIR LIMITS IS REPEALED (History: Sec. 75-2-111, 75-2-203, MCA; IMP, Sec. 75-2-202, 75-2-203, MCA; NEW, 1979 MAR p. 242, Eff. 3/16/79; REP, 1983 MAR p. 71, Eff. 1/28/83.)

16.8.906 RESTRICTIONS ON AREA CLASSIFICATIONS IS REPEALED (History: Sec. 75-2-111, 75-2-203, MCA; IMP, Sec. 75-2-202, 75-2-203, MCA; NEW, 1979 MAR p. 242, Eff. 3/16/79; REP, 1983 MAR p. 71, Eff. 1/28/83.)

16.8.907 EXCLUSIONS FROM INCREMENT CONSUMPTION IS REPEALED (History: Sec. 75-2-111, 75-2-203, MCA; IMP Sec. 75-2-202, 75-2-203, MCA; NEW, 1979 MAR p. 242, Eff. 3/16/79; REP, 1983 MAR p. 71, Eff. 1/28/83.)

Rule 16.8.908 reserved

16.8.909 REVIEW OF MAJOR STATIONARY SOURCES AND MAJOR MODIFICATION IS REPEALED (History: 75-2-111, 75-2-203, MCA; IMP Sec. 75-2-202, 75-2-203, MCA; NEW, 1979 MAR p. 242, Eff. 3/16/79; REP, 1983 MAR p. 71, Eff. 1/28/83.)

16.8.910 CONTROL TECHNOLOGY REVIEW IS REPEALED (History: Sec. 75-2-111, 75-2-203, MCA; IMP Sec. 75-2-202, 75-2-203, MCA; NEW, 1979 MAR p. 242, Eff. 3/16/79; REP, 1983 MAR p. 71, Eff. 1/28/83.)

16.8.911 AIR QUALITY REVIEW IS REPEALED (History: Sec. 75-2-111, 75-2-203, MCA; IMP Sec. 75-2-202, 75-2-203, MCA; NEW, 1979 MAR p. 242, Eff. 3/16/79; REP, 1983 MAR p. 71, Eff. 1/28/83.)

16.8.912 MONITORING IS REPEALED (History: Sec. 75-2-111, 75-2-203, MCA; IMP Sec. 75-2-202, 75-2-203, MCA; NEW, 1979 MAR p. 242, Eff. 3/16/79; REP, 1983 MAR p. 71, Eff. 1/28/83.)

16.8.913 ADDITIONAL IMPACT ANALYSES IS REPEALED (History: Sec. 75-2-111, 75-2-203, MCA; IMP Sec. 75-2-202, 75-2-203, MCA; NEW, 1979 MAR p. 242, Eff. 3/16/79; REP, 1983 MAR p. 71, Eff. 1/28/83.)

Rule 16.8.914 reserved

16.8.915 EXEMPTIONS FROM IMPACT ANALYSIS IS REPEALED (History: Sec. 75-2-111, 75-2-203, MCA; IMP Sec. 75-2-202, 75-2-203, MCA; NEW, 1979 MAR p. 242, Eff. 3/16/79; REP, 1983 MAR p. 71, Eff. 1/28/83.)

16.8.916 AIR QUALITY MODELS IS REPEALED (History: Sec. 75-2-111, 75-2-203, MCA; IMP Sec. 75-2-202, 75-2-203, MCA; NEW, 1979 MAR p. 242, Eff. 3/16/79; REP, 1983 MAR p. 71, Eff. 1/28/83.)

16.8.917 STACK HEIGHTS IS REPEALED (History: Sec. 75-2-111, 75-2-203, MCA; IMP Sec. 75-2-202, 75-2-203, MCA; NEW, 1979 MAR p. 242, Eff. 3/16/79; REP, 1983 MAR p. 71, Eff. 1/28/83.)

16.8.918 SOURCE INFORMATION IS REPEALED (History: Sec. 75-2-111, 75-2-203, MCA; IMP Sec. 75-2-202, 75-2-203, MCA; NEW, 1979 MAR p. 242, Eff. 3/16/79; REP, 1983 MAR p. 71, Eff. 1/28/83.)

Rule 16.8.919 reserved

16.8.920 SOURCES IMPACTING FEDERAL CLASS I AREA--ADDITIONAL REQUIREMENTS IS REPEALED (History: Sec. 75-2-111, 75-2-203, MCA; IMP Sec. 75-2-202, 75-2-203, MCA; NEW, 1979 MAR p. 242, Eff. 3/16/79; REP, 1983 MAR p. 71, Eff. 1/28/83.)

16.8.921 DEFINITIONS For the purpose of this subchapter, the following definitions apply:

(1) The board hereby adopts and incorporates by reference ARM 16.8.1423 which sets forth standards of performance for new stationary sources; ARM 16.8.1424 which sets forth emission standards for hazardous air pollutants; 40 CFR 81.327 which sets forth air quality attainment status designations for the

state of Montana; and "Standard Industrial Classification Manual, 1987," which sets forth classification codes for air pollution sources. A copy of ARM 16.8.1423, ARM 16.8.1424, 40 CFR 81.327 or "Standard Industrial Classification Manual, 1987," may be obtained from the Air Quality Bureau, Department of Health and Environmental Sciences, Cogswell Building, Helena, Montana 59620.

(2) "Actual emissions" means the actual rate of emission of a pollutant from an emission unit determined as follows:

(a) Actual emissions as of a particular date equal the average rate, in tons per year, at which the emissions unit actually emitted the pollutant during the previous two-year period and which represents normal operation. A different time period may be used if the department determines it to be more representative. Actual emissions are calculated using actual operating hours, production rates, and types of materials processed, stored or combusted during the selected time period.

(b) The department may presume that source specific allowable emissions for the unit are equivalent to the actual emissions of the unit.

(c) For emissions units which have not begun normal operations on the particular date, actual emissions equal the potential to emit of the emissions units on that date.

(3) "Allowable emissions" means the emission rate calculated using the maximum rates capacity of the source, unless the source is subject to enforceable permit conditions which limit the operating rate or hours of operation, or both, and the lowest of the following:

(a) applicable standards in ARM 16.8.1423 and ARM 16.8.1424;

(b) the applicable state emission limitation, including those with future compliance dates; or

(c) the emission rate specified as a permit condition, including those with future compliance dates.

(4) "Baseline concentration" means that ambient concentration level of a pollutant which exists in the baseline area at the time of the applicable baseline date minus, with reference to the baseline concentrations for sulfur dioxide and particulate matter, emissions from major stationary sources on which construction commenced after January 6, 1975. The baseline concentration includes:

(a) the actual emissions, including fugitive emissions, as of the baseline date from other stationary sources in existence on the applicable baseline date; and

(b) the allowable emissions of major stationary sources which commenced construction before January 6, 1975, but were not in operation by the applicable baseline date.

(5) "Baseline area" means any intrastate area in which a major stationary source or major modification would have an air quality impact equal to or greater than one microgram per cubic meter, annual average, and such area is designated as attain-



ment or as unclassified under 40 CFR 81.327.

(6)(a) "Baseline date" means:

(i) for sulfur dioxide:

(A) March 26, 1979, for all areas designated as attainment or unclassified under 40 CFR 81.327;

(B) for all other areas, the date upon which the area is designated as attainment.

(ii) for particulate matter, for each baseline area, the date of the first complete application after August 7, 1977, to construct a stationary source or modification which is major for particulate matter and which is subject to this subchapter or required to obtain a permit under Part C of the federal Clean Air Act.

(b) The baseline date may also be established in any county which has not previously established a baseline date, upon a petition presented to the department on behalf of either that county's board of commissioners or any elected alternative form of government adopted by it pursuant to Title 7, Chapter 3, Parts 1 through 7, MCA. Upon receipt of the petition, the department will initiate rulemaking procedures in accordance with the Montana Administrative Procedure Act. After notice and a public hearing by the board, the board shall make a decision on establishing the baseline date.

(7) "Best available control technology" (BACT) means an emission limitation, including a visible emission standard, based on the maximum degree of reduction for each pollutant subject to regulation under the Federal Clean Air Act or the Montana Clean Air Act which would be emitted from any proposed major stationary source or major modification which the department, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs determines is achievable for such source or modification through application of production processes or available methods, systems, and techniques, including fuel cleaning or treatment or innovative fuel combustion techniques for control of such pollutant.

(8) "Building, structure, facility, or installation" means all of the pollutant-emitting activities which belong to the same industrial grouping, are located on one or more contiguous or adjacent properties, and are under the control of the same person or persons under common control. Pollutant-emitting activities are considered as part of the same industrial grouping if they belong to the same "Major Group", those which have the same two-digit code, as described in the "Standard Industrial Classification Manual, 1987, as incorporated by reference in section (1) above.

(9) "Commence" as applied to construction of a major stationary source or major modification means that the owner or operator has all necessary preconstruction approvals and either has:

(a) begun, or caused to begin, a continuous program of physical on-site construction of the source to be completed



within a reasonable time; or

(b) entered into binding agreements or contractual obligations, which cannot be cancelled or modified without substantial loss to the owner or operator, to undertake a program of construction of the source to be completed within a reasonable time.

(10) "Complete" means, in reference to an application for a permit, that the application contains all of the information necessary for processing the application.

(11) "Construction" means fabrication, erection, installation, or alteration of an emission unit or stationary source.

(12) "Emission unit" means any part of a stationary source which emits or has the potential to emit any pollutant regulated under the Montana Clean Air Act.

(13) "EPA" means the United States Environmental Protection Agency.

(14) "Federal land manager" means, with respect to any lands in the United States, the Secretary of the department or his designee with authority over such lands.

(15) "Fugitive emissions" means those pollutant emissions which could not reasonably pass through a stack, chimney, vent or other functionally equivalent opening.

(16) "High terrain" means any area having an elevation 900 feet or more above the base of the stack of a source.

(17) "Indian governing body" means the governing body of any tribe, band, or group of Indians subject to the jurisdiction of the United States and recognized by the United States as possessing the power of self-government.

(18) "Indian reservation" means any federally-recognized reservation established by treaty, agreement, executive order, or act of Congress.

(19) "Innovative control technology" means any system of air pollution control that has not been adequately demonstrated in practice, but would have a substantial likelihood of achieving greater continuous emissions reduction than any other control system in current practice or of achieving at least comparable reductions at lower cost in terms of energy, economics, or non-air quality environmental impacts.

(20) "Low terrain" means any area other than high terrain.

(21) "Major modification" means any physical change in or change in the method of operation of a major stationary source that would result in a significant net emissions increase of any pollutant subject to regulation under the Montana Clean Air Act.

(a) Any net emissions increase that is significant for volatile organic compounds is considered significant for ozone.

(b) A physical change or change in the method of operation may not include:

(i) routine maintenance, repair, and replacement;

(ii) use of an alternative fuel or raw material by

reason of any order under sections 2(a) and (b) of the federal Energy Supply and Environmental Coordination Act of 1974 or by reason of a natural gas curtailment plan pursuant to the federal Power Act;

(iii) use of an alternative fuel by reason of an order or rule under section 125 of the federal Clean Air Act;

(iv) use of an alternative fuel at a steam generating unit to the extent that the fuel is generated from municipal solid waste;

(v) use of an alternative fuel or raw material by a stationary source which:

(A) the source was capable of accommodating before January 6, 1975, unless such change would be prohibited under any enforceable permit condition which was established after January 6, 1975 pursuant to 40 CFR 52.21 or under regulations approved or conditionally approved pursuant to 40 CFR 51.18 or 40 CFR 51.24; or

(B) the source is approved to use under any permit issued under 40 CFR 52.21 or under regulations approved or conditionally approved pursuant to 40 CFR 51.24;

(vi) an increase in the hours of operation or in the production rate, unless such change would be prohibited under any enforceable permit condition which was established after January 6, 1975, pursuant to 40 CFR 52.21 or under regulations approved or conditionally approved pursuant to 40 CFR 51.18 or 40 CFR 51.24;

(vii) any change in ownership at a stationary source.

(22) "Major stationary source" means:

(a) any of the following stationary sources of air pollutants which emits, or has the potential to emit, 100 tons per year or more of any pollutant subject to regulation under the Montana Clean Air Act: fossil-fuel-fired steam electric plants of more than 250 million British thermal units-per-hour heat input, coal cleaning plants (with thermal dryers), kraft pulp mills, portland cement plants, primary zinc smelters, iron and steel mill plants, primary aluminum ore reduction plants, primary copper smelters, municipal incinerators capable of charging more than 250 tons of refuse per day, hydrofluoric, sulfuric, and nitric acid plants, petroleum refineries, lime plants, phosphate rock processing plants, coke oven batteries, sulfur recovery plants, carbon black plants (furnace process), primary lead smelters, fuel conversion plants, sintering plants, secondary metal production plants, chemical process plants, fossil fuel boilers (or combinations thereof) totaling more than 250 million British thermal units per hour heat input, petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels, taconite ore processing plants, glass fiber processing plants, and charcoal production plants;

(b) notwithstanding the stationary source size specified in subsection (22)(a) of this rule, any stationary source which

emits, or has the potential to emit, 250 tons per year or more of any air pollutant subject to regulation under the Montana Clean Air Act; or

(c) any physical change that would occur at a stationary source not otherwise qualifying under subsection (22)(a) of this rule as a major stationary source if the change and the original source would constitute a major stationary source.

(i) A major source that is major for volatile organic compounds is considered major for ozone.

(23) "Necessary preconstruction approvals or permits" means those permits or approvals required under the Montana Clean Air Act and regulations at the time of the filed application.

(24) "Net emissions increase" means the amount by which the sum of the following exceeds zero:

(a) any increase in actual emissions from a particular physical change or change in the method of operation at a stationary source; and

(b) any other increases and decreases in actual emissions at the source that are contemporaneous with the particular change and are otherwise creditable.

(i) An increase or decrease in actual emissions is contemporaneous with the increase from the particular change only if it occurs within 5 years before the date that the increase from the particular change occurs.

(ii) An increase or decrease in actual emissions is creditable only if:

(A) the department has not relied on the increase or decrease in issuing an active permit for the source;

(B) an increase in actual emissions is creditable only to the extent that the new level of actual emissions exceeds the old level;

(C) a decrease in actual emissions is creditable only to the extent that the old level of actual emissions or the old level of allowable emissions, whichever is lower, exceeds the new level of actual emissions. A decrease is creditable only if it is enforceable at and after the time that actual operation begins and it has the same qualitative significance for public health and welfare as that attributed to the increase from the particular change.

(iii) An increase that results from a physical change at a source occurs when the emissions unit on which construction occurred becomes operational and begins to emit a particular pollutant. Any replacement unit that requires shakedown becomes operational only after a reasonable shakedown period, not to exceed 180 days.

(c) Particulate fugitive emissions do not count in determining net emissions increase for all source types not listed in subsection (22)(a) of this rule, ARM 16.8.1423, or ARM 16.8.1424.

(d) An increase or decrease in actual emissions of



sulfur dioxide or particulate matter which occurs before the applicable baseline date is creditable only if it is required to be considered in calculating the amount of maximum allowable increase remaining available.

(25) "Owner or operator" means any person who owns, leases, operates, controls, or supervises any building, structure, facility, or installation.

(26) "Pollutant" and "air pollutant" means any air pollution agent or combination of agents, including any physical, chemical, biological, radioactive, including source material, special nuclear material and by-product material, substance or matter which is emitted into or otherwise enters the ambient air.

(27) "Potential to emit" means the capability of a source at maximum design capacity to emit any air pollutant after the application of air pollution control equipment. Any enforceable permit condition or regulation which limits hours of operation, the type or amount of material combusted, stored or processed, or other production of emissions limiting factors, is treated as part of its design. Particulate fugitive emissions do not count in determining potential to emit for all source types not listed in subsection (22)(a) of this rule, ARM 16.8.1423, or ARM 16.8.1424.

(28) "Stationary source" means any building, structure, facility, or installation which emits or may emit any air pollutant subject to regulation under the Montana Clean Air Act.

(29) "Secondary emissions" means emissions which would occur as a result of the construction or operation of a major stationary source or modification, but do not come from the major stationary source or modification itself. For the purpose of this section, secondary emissions must be specific, well defined, quantifiable, and impact the same general area as the stationary source or modification which causes the secondary emissions. Secondary emissions may include, but are not limited to:

(a) emissions from trains coming to or from the new or modified stationary source;

(b) emissions from any off-site support facility which would not otherwise be constructed or increase its emissions as a result of the construction or operation of the major stationary source or modification.

(30)(a) "Significant" means, in reference to a net emissions increase or the potential of a source to emit any of the following pollutants, a rate of emissions that would equal or exceed any of the following rates:

Pollutant and Emissions Rate

Carbon Monoxide: 100 tons per year (tpy)

Nitrogen oxides: 40 tpy

Sulfur dioxide: 40 tpy

Particulate matter: 25 tpy



Ozone: 40 tpy of volatile organic compounds  
Lead: 0.6 tpy  
Asbestos: 0.007 tpy  
Beryllium: 0.0004 tpy  
Mercury: 0.1 tpy  
Vinyl chloride: 1 tpy  
Fluorides: 3 tpy  
Sulfuric acid mist: 7 tpy  
Hydrogen sulfide (H<sub>2</sub>S): 10 tpy  
Reduced sulfur compounds (including H<sub>2</sub>S): 10 tpy  
Total reduced sulfur (including H<sub>2</sub>S): 10 tpy  
PM-10: 15 tpy

(b) "Significant" means, in reference to a net emissions increase or the potential of a source to emit a pollutant subject to regulation under the Montana Clean Air Act that subsection (30)(a) of this rule does not list, any emissions rate.

(c) Notwithstanding subsection (30)(a) of this rule, "significant" means any emission rate or any net emissions increase associated with a major stationary source or modification which would construct within 10 kilometers of a Class I area and have an impact on such area equal to or greater than one  $\mu\text{g}/\text{m}^3$  24-hour average.

(31) "Temporary" means a period less than 2 years. (History: Sec. 75-2-111, 75-2-203, MCA; IMP, Sec. 75-2-202, 75-2-203, MCA; NEW, 1983 MAR p. 71, Eff. 1/28/83; AMD, 1983 MAR p. 275, Eff. 4/1/83; AMD, 1985 MAR p. 1326, Eff. 9/13/85; AMD, 1988 MAR p. 826, Eff. 4/29/88.)

16.8.922 DETERMINATION OF BEST AVAILABLE CONTROL TECHNOLOGY (1) The board hereby adopts and incorporates by reference ARM 16.8.1423, which sets forth standards of performance for new stationary sources, and ARM 16.8.1424, which sets forth emission standards for hazardous air pollutants. A copy of ARM 16.8.1423 or 16.8.1424 may be obtained from the Air Quality Bureau, Department of Health and Environmental Sciences, Cogswell Building, Helena, Montana, 59620.

(2) In no event may application of the best available control technology result in emissions of any contaminant which would exceed the emissions allowed by any applicable standard under ARM 16.8.1423 and 16.8.1424.

(3) If the department determines that technological or economic limitations on the application of measurement methodology to a particular emissions unit would make the imposition of an emission standard infeasible, it may instead prescribe a design, equipment, work practice or operational standard or combination thereof, to require the application of best available control technology. Such standard must, to the degree possible, set forth the emission reduction achievable by implementation of such design, equipment, work practice or operation and must provide for compliance by means which achieve equiva-

lent results. (History: Sec. 75-2-111, 75-2-203, MCA; IMP, Sec. 75-2-202, 75-2-203, MCA; NEW, 1983 MAR p. 71, Eff. 1/28/83.)

16.8.923 AREA CLASSIFICATION (1) The board hereby adopts and incorporates by reference 40 CFR Sec. 81.327 which sets forth air quality attainment status designations for the state of Montana. A copy of 40 CFR Sec. 81.327 may be obtained from the Air Quality Bureau, Department of Health and Environmental Sciences, Cogswell Building, Helena, Montana, 59620.

(2) Each of the following areas is a Class I area and may not be redesignated:

- (a) Bob Marshall Wilderness Area,
- (b) Anaconda Pintler Wilderness Area,
- (c) Cabinet Mountains Wilderness Area,
- (d) Gates of the Mountains Wilderness Area,
- (e) Glacier National Park,
- (f) Medicine Lake Wilderness Area,
- (g) Mission Mountains Wilderness Area,
- (h) Red Rock Lake Wilderness Area,
- (i) Scapegoat Wilderness Area,
- (j) Selway-Bitterroot Wilderness Area,
- (k) UL Bend Wilderness Area, and
- (l) Yellowstone National Park.

(3) The following two areas have been designated as Class I by EPA and may be redesignated to another class only by EPA:

- (a) Northern Cheyenne Reservation, and
- (b) Flathead Reservation.

(4) All other areas of Montana designated as attainment or unclassifiable under 40 CFR 81.327 are Class II areas, but may be redesignated.

(5) The following areas may be redesignated only as Class I or II:

(a) An area which as of August 7, 1977, exceeded 10,000 acres in size and was a national monument, a national primitive area, a national preserve, a national recreational area, a national wild and scenic river, a national wildlife refuge, a national lakeshore or seashore; and

(b) A national park or national wilderness area established after August 7, 1977, which exceeds 10,000 acres in size. (History: Sec. 75-2-111, 75-2-203, MCA; IMP, Sec. 75-2-202, 75-2-203, MCA; NEW, 1983 MAR p. 71, Eff. 1/28/83.)

16.8.924 REDESIGNATION (1) Except as provided in ARM 16.8.923, any area of the state may be redesignated as herein provided.

(2)(a) A redesignation may be requested by a municipality, county, or other general unit of local government on being petitioned by 15% of the qualified electors residing within the jurisdiction of the local government unit. The area to be redesignated must lie within the external boundaries of the

local government unit, which shall be the petitioning unit. The petition signed by 15% of the qualified electors must include:

(i) A legal description of the boundary of the area proposed to be redesignated;

(ii) An explanation of the purpose of the petition and redesignation; and

(iii) A statement to the effect that those persons signing the petition desire the described area to be redesignated to either Class I, Class II, or Class III and such statement must specify which class.

(b) In areas where petitioning by qualified electorate is inappropriate, such as a state park, federal wilderness area, and areas which cross local government boundaries, the agency responsible for those lands or the department may request a redesignation so long as the requirements and limitations in ARM 16.8.922 and ARM 16.8.923 are met.

(3) A request for redesignation, other than those applicable to areas within the exterior boundaries of a reservation of a federally recognized Indian tribe, must be submitted to the department on application forms available from the department. The redesignation application must contain a written statement of reasons for the proposed redesignation, including a satisfactory description and analysis of the health, environmental, economic, social and energy effects of the proposed redesignation. In a case-by-case manner, the department may accept a description and analysis that is not complete and final. The decision on accepting an incomplete application will be based upon the available resources to the petitioning unit and the department at the time of the request. Alleged effects of the redesignation and supporting evidence that would tend to establish the area as suitable and desirable for redesignation, however, must be included in all redesignation requests. It is the department's responsibility to complete the necessary analyses for such case-by-case requests. Upon receipt of an application, the department may request additional information necessary for review from the applicant. In the case where the department requests the redesignation, the department shall complete the application required under this section. After satisfaction of such requirements and after the department has consulted with the elected officials of local government units located in the area covered by the proposed redesignation, the department shall make a recommendation on the application to the board.

(4) The board shall make a decision on all non-reservation redesignation applications after conducting a public hearing which shall not be subject to the contested case procedures of the Montana Administrative Procedure Act. At least 60 days prior to the public hearing, the department shall:

(a) Notify other states, Indian governing bodies, and federal land managers whose lands may be affected by the proposed redesignation;



(b) Make available for public inspection a discussion of the reasons for the proposed redesignation, including a satisfactory description and analysis of the health, environmental, economic, social and energy effects of the proposed redesignation;

(c) Give notice to the public by prominent advertisement in the area affected announcing the date, time and place of the hearing;

(d) Notify the EPA administrator through the Region VIII office;

(e) Notify each local air pollution control agency in the affected area and notify any other states which may be affected;

(f) Prior to the issuance of notice of hearing respecting the redesignation of an area that includes any federal lands, provide written notice to the appropriate federal land manager and afford adequate opportunity not to exceed 60 days to confer with the department respecting the redesignation and to submit written comments and recommendations. In redesignating any area with respect to which any federal land manager had submitted written comments and recommendations, the department shall have published a list of any inconsistency between such redesignation and such comments and recommendations (together with the reasons for making such redesignation against the recommendation of the federal land manager.)

(5) Any area other than an area to which ARM 16.8.923 refers may be redesignated as Class III if:

(a) The redesignation would meet the requirements of provisions established in ARM 16.8.924(3) and (4);

(b) The redesignation, except any established by any Indian governing body, has been specifically approved by the Governor, after consultation with the appropriate committees of the Legislature, if it is in session, or with the leadership of the Legislature, if it is not in session and if general purpose units of local government representing a majority of the residents of the area to be redesignated enact legislation, including resolutions where appropriate, concurring in the redesignation;

(c) The redesignation would not cause, or contribute to, a concentration of any air contaminant which would exceed any maximum allowable increase permitted under the classification of any other area or any applicable ambient air quality standard;

(d) Any permit application for any major stationary source or major modification subject to provisions established in ARM 16.8.927 which could receive a permit only if the area in question were redesignated as Class III, and any material submitted as part of that application, were available, insofar as was practicable, for public inspection prior to any public hearing on redesignation of any area as Class III.

(6) Any area redesignated from one class to another will



not cause any previously existing baseline date to be changed.

(7) Any complete permit application submitted to the department before any proposed redesignation request that has been declared satisfactory by the department shall be processed under the classification system present at the time of the completed permit application. This provision, however, does not absolve any source from meeting emission control requirements that may be necessary to meet any eventual change in classification for an area. (History: Sec. 75-2-111, 75-2-203, MCA; IMP, Sec. 75-2-202, 75-2-203, MCA; NEW, 1983 MAR p. 71, Eff. 1/28/83; AMD, 1983 MAR p. 275, Eff. 4/1/83; AMD, 1988 MAR p. 826, Eff. 4/29/88.)

16.8.925 AMBIENT AIR INCREMENTS (1) The maximum allowable increases over the baseline concentrations for sulfur dioxide or particulate matter are:

(a) For any Class I area: micrograms per cubic meter ( $\mu\text{g}/\text{m}^3$ )

<u>Total suspended particulate:</u>	
Annual Geometric mean	5
Twenty-four hour maximum	10

<u>Sulfur dioxide:</u>	
Annual arithmetic mean	2
Twenty-four hour maximum	5
Three-hour maximum	25

(b) For any Class II area: ( $\mu\text{g}/\text{m}^3$ )

<u>Total suspended particulate:</u>	
Annual geometric mean	19
Twenty-four hour maximum	37

<u>Sulfur dioxide:</u>	
Annual arithmetic mean	20
Twenty-four hour maximum	91
Three-hour maximum	512

(c) For any Class III area: ( $\mu\text{g}/\text{m}^3$ )

<u>Total suspended particulate:</u>	
Annual geometric mean	37
Twenty-four hour maximum	75

<u>Sulfur dioxide:</u>	
Annual arithmetic mean	40
Twenty-four hour maximum	182
Three-hour maximum	700

(2) For any period but an annual period, the applicable maximum allowable increase may be exceeded only once per year at any one location. (History: Sec. 75-2-111, 75-2-203, MCA; IMP, Sec. 75-2-202, 75-2-203, MCA; NEW, 1983 MAR p. 71, Eff. 1/28/83; AMD, 1988 MAR p. 826, Eff. 4/29/88.)

16.8.926 AMBIENT AIR LIMITS (1) The board hereby adopts and incorporates by reference ARM Title 16, chapter 8, subchapter 8, which sets forth Montana ambient air quality standards and 40 CFR Part 50 which sets forth federal ambient air quality standards. A copy of ARM Title 16, chapter 8, subchapter 8 and 40 CFR Part 50 may be obtained from the Air Quality Bureau, Department of Health and Environmental Sciences, Cogswell Building, Helena, Montana, 59620.

(2) No concentration of a pollutant may exceed any Montana or national ambient air quality standard. (History: Sec. 75-2-111, 75-2-203, MCA; IMP, Sec. 75-2-202, 75-2-203; NEW, 1983 MAR p. 71, Eff. 1/28/83.)

16.8.927 AIR QUALITY LIMITATIONS (1) Increases in air pollution concentrations above the baseline concentrations must be determined by air quality modeling and/or ambient air monitoring. The degree to which increment is consumed throughout the state must be reviewed by the department every 3 years.

(2) In the event that the emissions from any proposed major stationary source or major modification would have an impact greater than or equal to one microgram per cubic meter, annual average, of sulfur dioxide or particulate matter in any other state, the owner or operator must submit, by registered mail, a copy of the application of the proposed major stationary source or major modification and public notice of the permit application to the appropriate air pollution control agency of the affected state at the time the application is submitted to the department. (History: Sec. 75-2-111, 75-2-203, MCA; IMP, Sec. 75-2-202, 75-2-203, MCA; NEW, 1983 MAR p. 71, Eff. 1/28/83.)

16.8.928 EXCLUSIONS FROM INCREMENT CONSUMPTION (1) The board hereby adopts and incorporates by reference ARM Title 16, chapter 8, subchapter 8, which sets forth Montana ambient air quality standards and 40 CFR Part 50 which sets forth federal ambient air quality standards. A copy of ARM Title 16, chapter 8, subchapter 8, and 40 CFR Part 50 may be obtained from the Air Quality Bureau, Department of Health and Environmental Sciences, Cogswell Building, Helena, Montana, 59620.

(2) The following concentrations are excluded in determining compliance with a maximum allowable increase:

(a) Concentrations attributable to the increase in emissions from stationary sources which have converted from the use of petroleum products, natural gas, or both, by reason of an order in effect under sections 2(a) and (b) of the federal

Energy Supply and Environmental Coordination Act of 1974 over the emissions from such sources before the effective date of such an order;

(b) Concentrations attributable to the increase in emissions from sources which have converted from using natural gas by reason of a natural gas curtailment plan in effect pursuant to the federal Power Act over the emissions from such sources before the effective date of such plan;

(c) Concentrations of particulate matter attributable to the increase in emissions from construction or temporary emission-related activities.

(d) Concentrations attributable to the temporary increase in emission of sulfur dioxide or particulate matter from stationary sources which are affected by revisions of the state implementation plan, approved or conditionally approved by EPA, provided that:

(i) the time period such temporary increase in emissions is not renewable and may not exceed 2 years in duration, unless a longer time is approved by the department and EPA; and

(ii) such temporary increase in emissions does not impact a Class I area or an area where an applicable increment is known to be violated or cause or contribute to the violation of a national or Montana ambient air quality standard.

(3) In reference to the exclusions in subsection (2)(a) through (b) of this rule:

(a) No exclusions of such concentrations may apply more than 5 years after the effective date of the order to which subsection (2)(a) refers or the plan to which subsection (2)(b) refers, whichever is applicable.

(b) If both such order and plan are applicable, no such exclusion may apply more than 5 years after the later of such effective date.

(4) The Governor may direct the board to conduct rule-making proceedings to exclude the increase in concentrations attributable to new sources outside the United States from the requirements of ARM 16.8.925. (History: Sec. 75-2-111, 75-2-203, MCA; IMP, Sec. 75-2-202, 75-2-203, MCA; NEW, 1983 MAR p. 71, Eff. 1/28/83.)

16.8.929 REVIEW REQUIREMENTS (1) The board hereby adopts and incorporates by reference ARM Title 16, chapter 8, subchapter 11, which sets forth permitting requirements for construction and operation of air contaminant sources. A copy of ARM Title 16, chapter 8, subchapter 11, may be obtained from the Air Quality Bureau, Department of Health and Environmental Sciences, Cogswell Building, Helena, Montana, 59620.

(2) No major stationary source or major modification to which this chapter applies may be constructed or operated without an air quality permit issued by the department. The department may issue an air quality permit for construction and operation of a major stationary source or a major modification



if the requirements of the Montana Clean Air Act, and ARM Title 16, chapter 8, subchapter 11 and this subchapter have been met. (History: Sec. 75-2-111, 75-2-203, MCA; IMF, Sec. 75-2-202, 75-2-203, MCA; NEW, 1983 MAR p. 71, Eff. 1/28/83.)

16.8.930 PERMIT REVIEW -- INFORMATION REQUIRED (1) The owner or operator of a proposed major stationary source or major modification shall submit to the department all information necessary to perform any analysis or make any determination required under this subchapter. Such information must include:

(a) A description of the nature, location, design capacity, and typical operating schedule of the source or modification, including specifications and drawings showing its design and plant layout;

(b) A detailed schedule for construction of the source or modification;

(c) A detailed description as to what system of continuous emission reduction is planned by the source or modification, emission estimates, and any other information as necessary to determine that best available control technology as applicable would be applied.

(2) The department may request the owner or operator to provide information on:

(a) The air quality impact of the source or modification, including meteorological and topographical data necessary to estimate such impact; and

(b) The air quality impacts and the nature and extent of any or all general commercial, residential, industrial, and other growth which has occurred since the appropriate baseline date in the area the source or modification would affect. (History: Sec. 75-2-111, 75-2-203, MCA; IMP, Sec. 75-2-202, 75-2-203, MCA; NEW, 1983 MAR p. 71, Eff. 1/28/83; AMD, 1983 MAR p. 275, Eff. 4/1/83.)

16.8.931 CONTROL TECHNOLOGY REVIEW (1) The board hereby adopts and incorporates by reference ARM 16.8.1423 which sets forth standards of performance for new stationary sources and ARM 16.8.1424 which sets forth emission standards for hazardous air pollutants. A copy of ARM 16.8.1423 and 16.8.1424 may be obtained from the Air Quality Bureau, Department of Health and Environmental Sciences, Cogswell Building, Helena, Montana, 59620.

(2) The proposed source or modification must meet each applicable emission limitation under the state implementation plan and each applicable emission standard and standard of performance under ARM 16.8.1423 and 16.8.1424.

(3) The source or modification must apply best available control technology for each pollutant regulated under the Montana Clean Air Act that it will emit in significant amounts. In the case of a modification, this requirement applies only to



each new or modified emission unit which would cause a net emissions increase of such a pollutant.

(4) For phased construction projects, the determination of best available control technology must be reviewed and modified as appropriate at the latest reasonable time prior to commencement of construction of each independent phase of the project.

(5) Nothing in this rule may be construed to relieve any applicant of the responsibility of complying with the emission control requirements of ARM 16.8.1103. (History: Sec. 75-2-111, 75-2-203, MCA; IMP, Sec. 75-2-202, 75-2-203, MCA; NEW, 1983 MAR p. 71, Eff. 1/28/83.)

16.8.932 SOURCE IMPACT ANALYSIS (1) The board hereby adopts and incorporates by reference ARM Title 16, chapter 8, subchapter 8, which sets forth Montana ambient air quality standards and 40 CFR Part 50 which sets forth federal ambient air quality standards. A copy of ARM Title 16, chapter 8, subchapter 8 and 40 CFR Part 50 may be obtained from the Air Quality Bureau, Department of Health and Environmental Sciences, Cogswell Building, Helena, Montana, 59620.

(2) The owner or operator of the proposed major stationary source or major modification shall demonstrate to the department that allowable emission increases from the proposed source or modification, in conjunction with all other applicable emissions increases or reductions, including secondary emissions, will not cause or contribute to air pollution in violation of:

(a) Any national or Montana ambient air quality standard in any area; or

(b) Any applicable maximum allowable increase over the baseline concentration in any area. (History: Sec. 75-2-111, 75-2-203, MCA; IMP, Sec. 75-2-202, 75-2-203, MCA; NEW, 1983 MAR p. 71, Eff. 1/28/83.)

16.8.933 PRECONSTRUCTION MONITORING (1) The board hereby adopts and incorporates by reference ARM Title 16, chapter 8, subchapter 8, which sets forth Montana ambient air quality standards and 40 CFR Part 51, Appendix S, which sets forth the federal emission offset interpretative ruling. A copy of ARM Title 16, chapter 8, subchapter 8, and 40 CFR Part 51, Appendix S, may be obtained from the Air Quality Bureau, Department of Health and Environmental Sciences, Cogswell Building, Helena, Montana, 59620.

(2) An analysis of ambient air quality must be performed for each pollutant regulated under the Montana Clean Air Act which the major stationary source or major modification would emit in a significant amount.

(3) With respect to any pollutant for which no national ambient air quality standard exists, the analysis must be performed primarily by modeling. However, the department may

require such air quality monitoring data as it determines is necessary to assess ambient air quality for that pollutant in any area that the emissions of that pollutant would affect if there is a method acceptable to the department for the monitoring of that pollutant.

(4) With respect to any pollutant, other than non-methane hydrocarbons, for which such a standard does exist, the analysis must contain continuous air quality monitoring data gathered for purposes of determining whether emissions of that pollutant would cause or contribute to a violation of the standard or any maximum allowable increase.

(5) In general, the continuous air quality monitoring data that is required must have been gathered over a period of at least one year and must represent at least the year preceding receipt of the application, except that, if the department determines that a complete and adequate analysis can be accomplished with monitoring data gathered over a period shorter than one year, but not less than 4 months, the data that is required must have been gathered over at least that shorter period.

(6) The owner or operator of a proposed stationary source or modification of volatile organic compounds who satisfies all conditions of 40 CFR Part 51, Appendix S, section IV, may provide post-approval monitoring data for ozone in lieu of providing preconstruction data as required by this rule. (History: Sec. 75-2-111, 75-2-203, MCA; IMP, Sec. 75-2-202, 75-2-203, MCA; NEW, 1983 MAR p. 71, Eff. 1/28/83.)

16.8.934 POST-CONSTRUCTION MONITORING The owner or operator of a major stationary source or major modification, after construction of the stationary source or modification, shall conduct such ambient monitoring as the department determines is reasonably necessary to determine the effect emissions from the stationary source or modification have or may have on air quality in any area. (History: Sec. 75-2-111, 75-2-203, MCA; IMP, Sec. 75-2-202, 75-2-203, MCA; NEW, 1983 MAR p. 71, Eff. 1/28/83.)

16.8.935 ADDITIONAL IMPACT ANALYSIS (1) The owner or operator shall provide an analysis of the impairment to visibility, soils, and vegetation that would occur as a result of the major stationary source or major modification and general commercial, residential, industrial, and other growth associated with the source or modification. The owner or operator need not provide an analysis of the impact on vegetation having no significant commercial or recreational value.

(2) The owner or operator shall provide an analysis of the air quality impact projected for the area as a result of general commercial, residential, industrial, and other growth associated with the source or modification. (History: Sec. 75-2-111, 75-2-203, MCA; IMP, Sec. 75-2-202, 75-2-203, MCA;

NEW, 1983 MAR p. 71, Eff. 1/28/83.)

16.8.936 EXEMPTIONS FROM REVIEW (1) The requirements of ARM 16.8.932, 16.8.933, 16.8.934, and 16.8.935 do not apply to a major stationary source or major modification if:

(a) the major stationary source is a nonprofit health or nonprofit educational institution or a major modification that would occur at such an institution; or

(b) the source or modification is a portable stationary source which has previously received a permit meeting the requirements contained in ARM 16.8.929 through 16.8.935, if:

(i) the source proposed to relocate and emissions of the source at the new location would be temporary;

(ii) the emissions from the source would not exceed its allowable emissions;

(iii) the emissions from the source would not cause a significant impact on any Class I area and no area where an applicable increment is known to be violated; and

(v) reasonable notice is given to the department prior to the relocation identifying the proposed new location and the probable duration of operation at the new location. Such notice must be given not less than 20 days in advance of the proposed relocation unless a different time duration is previously approved by the department.

(c) the allowable emissions of that pollutant from a new source, or the net emissions increase of that pollutant from a modification, would be temporary and impact no Class I area and no area where an applicable increment is known to be violated; and

(d) the source is located in a Class II area, a major stationary source that was in existence on March 1, 1978, is being modified, and the net increase in allowable emissions of each pollutant subject to regulation under the Montana Clean Air Act from the modification after the application of best available control technology would be less than 50 tons per year.

(2) The department may exempt a major stationary source or major modification from the requirements of ARM 16.8.933 or 16.8.934 with respect to monitoring for a particular pollutant if:

(a) the net emissions increase from the source or modification would cause, in any area, air quality impacts less than the following amounts:

(i) carbon monoxide -  $575 \mu\text{g}/\text{m}^3$ , 8-hour average;

(ii) nitrogen dioxide -  $14 \mu\text{g}/\text{m}^3$ , annual average;

(iii) total suspended particulates -  $10 \mu\text{g}/\text{m}^3$ , 24-hour average;

(iv) PM-10 -  $10 \mu\text{g}/\text{m}^3$ , 24-hour average;

(v) sulfur dioxide -  $13 \mu\text{g}/\text{m}^3$ , 24-hour average;



(vi) ozone - No de minimus air quality level is provided for ozone. However, any net increase of 100 tons per year or more of volatile organic compounds subject to PSD would be required to perform ambient impact analysis including the gathering of ambient air quality data.

- (vii) lead -  $0.1 \mu\text{g}/\text{m}^3$ , 24-hour average;
- (viii) mercury -  $0.25 \mu\text{g}/\text{m}^3$ , 24-hour average;
- (ix) beryllium -  $0.0005 \mu\text{g}/\text{m}^3$ , 24-hour average;
- (x) fluorides -  $0.25 \mu\text{g}/\text{m}^3$ , 24-hour average;
- (xi) vinyl chlorides -  $15 \mu\text{g}/\text{m}^3$ , 24-hour average;
- (xii) total reduced sulfur -  $10 \mu\text{g}/\text{m}^3$ , 1-hour average;
- (xiii) hydrogen sulfide -  $0.04 \mu\text{g}/\text{m}^3$ , 1-hour average;
- (xiv) reduced sulfur compounds -  $10 \mu\text{g}/\text{m}^3$ , 1-hour average; or

(b) the concentrations of the pollutant in the area that the source or modification would affect are less than the concentrations listed in subsection (2)(a); or

(c) the pollutant is not listed in subsection (2)(a).

(3) Nothing in this rule may be construed to relieve any applicant of the responsibility of complying with the requirements of ARM 16.8.1103 or 16.8.1105. (History: Sec. 75-2-111, 75-2-203, MCA; IMP, Sec. 75-2-202, 75-2-203, MCA; NEW, 1983 MAR p. 71, Eff. 1/28/83; AMD, 1983 MAR p. 275, Eff. 4/1/83; AMD, 1988 MAR p. 826, Eff. 4/29/88.)

16.8.937 AIR QUALITY MODELS (1) The board hereby adopts and incorporates by reference "Guideline on Air Quality Models (Revised)" (Publication No. EPA 450/2-78-027R, July, 1986, Office of Air Quality Planning and Standards, Research Triangle Park, NC 27711) which sets forth air quality modeling proce-

dures including requirements for concentration estimates, air quality models, data requirements and model validation and calibration; and ARM 16.8.1107(2) and (3) which sets forth the provisions for public notice of the submittal of an application for an air quality permit, notice of the department's preliminary determination on the application for the air quality permit, and the public comment period. A copy of ARM 16.8.1107(2) and (3) may be obtained from the Air Quality Bureau, Department of Health and Environmental Sciences, Cogswell Building, Helena, Montana 59620. "Guideline on Air Quality Models (Revised)" is available for public inspection and copying at the Air Quality Bureau, Department of Health and Environmental Sciences, Cogswell Building, 1400 Broadway, Helena, Montana 59620; and at EPA's Public Information Reference Unit, 401 M Street SW, Washington, DC 20460; and at the libraries of each of the ten EPA Regional Offices. Copies are available as supplies permit from the Library Service Office (MD-35), U.S. Environmental Protection Agency, Research Triangle Park NC 27711; and copies may be purchased from the National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22161.

(2) All estimates of ambient concentrations required under this rule must be based on the applicable air quality models, data bases, and other requirements specified in the "Guidelines on Air Quality Models (Revised)" (Publication No. EPA 450/2-78-027R, July, 1986, Office of Air Quality Planning and Standards, Research Triangle Park NC 27711).

(3) Where a preferred air quality impact model specified in the "Guideline on Air Quality Models (Revised)" is inappropriate, the model may be modified or another model substituted. Such a change must be subject to notice and opportunity for public comment under ARM 16.8.1107(2) and (3). Written approval of the EPA administrator must be obtained for any modification or substitution. Methods like those referenced in "Guideline on Air Quality Models (Revised)", July, 1986, should be used to determine the comparability of air quality models. (History: Sec. 75-2-111, 75-2-203, MCA; IMP, Sec. 75-2-202, 75-2-203, MCA; NEW, 1983 MAR p. 71, Eff. 1/28/83; AMD, 1987 MAR p. 744, Eff. 7/20/87; AMD, 1988 MAR p. 500, Eff. 3/11/88.)

16.8.938 MONITORING AND STACK HEIGHTS (1) The board hereby adopts and incorporates by reference 40 CFR Part 58, Appendix B, which sets forth the minimum quality assurance requirements for the control and assessment of the quality of the prevention of significant deterioration ambient air monitoring data submitted to EPA; and ARM Title 16, chapter 8, subchapter 12, which sets forth the requirements for stack heights and dispersion techniques for air contaminant sources.

A copy of 40 CFR Part 58, Appendix B, and ARM Title 16, Chapter 8, sub-chapter 12, may be obtained from the Air Quality Bureau, Department of Health and Environmental Sciences, Cogswell Building, Helena, Montana, 59620.

(2) All monitoring must be performed in accordance with 40 CFR Part 58, Appendix B. An owner or operator may submit a monitoring program for a proposed source or modification to the department for review. Within 30 days, the department must review and either approve the monitoring program or specify the changes necessary for approval. If the department fails to act within the 30 days, the monitoring program shall be deemed approved.

(3) The degree of emission limitation required for control of any air pollutant under this sub-chapter will be determined by provisions of ARM, Title 16, Chapter 8, sub-chapter 12. (History: Sec. 75-2-111, 75-2-203, MCA; IMP, Sec. 75-2-202, 75-2-203, MCA; NEW, 1983 MAR p. 71, Eff. 1/28/83.)

16.8.939 INNOVATIVE CONTROL TECHNOLOGY (1) The board hereby adopts and incorporates by reference ARM Title 16, Chapter 8, sub-chapter 8, which sets forth Montana ambient air quality standards, and 40 CFR Part 50 which sets forth federal ambient air quality standards. A copy of ARM Title 16, Chapter 8, sub-chapter 8, and 40 CFR Part 50 may be obtained from the Air Quality Bureau, Department of Health and Environmental Sciences, Cogswell Building, Helena, Montana, 59620.

(2) An owner or operator of a proposed major stationary source or major modification may request the department to approve a system of innovative control technology. The department may, with the consent of the governor of each affected state, determine that the source or modification may employ a system of innovative control technology if:

(a) The proposed control system would not cause or contribute to an unreasonable risk to public health, welfare, or safety in its operation or function;

(b) The owner or operator agrees to achieve a level of continuous emissions reduction equivalent to that which would have been required under ARM 16.8.931 by a date specified by the department. Such date shall not be later than 4 years from the time of startup or 7 years from permit issuance.

(c) The source or modification would meet the requirements of ARM 16.8.931 and 16.8.932 based on the emissions rate that the stationary source employing the system of innovative control technology would be required to meet on the date specified by the department.

(d) The source or modification would not before the date specified by the department:

(i) Cause or contribute to any violation of an applicable national or Montana ambient air quality standard;



(ii) Impact any Class I area; or  
(iii) Impact any area where an applicable increment is known to be violated.

(e) All other applicable requirements including those for public participation have been met.

(3) The department shall withdraw any approval to employ a system of innovative control technology made under this section, if:

(a) The proposed system fails by the specified date to achieve the required continuous emissions reduction rate;

(b) The proposed system fails before the specified date so as to contribute to an unreasonable risk to public health, welfare, or safety; or

(c) The department decides at any time that the proposed system is unlikely to achieve the required level of control or to protect the public health, welfare, or safety.

(4) If a source or modification fails to meet the required level of continuous emissions reduction within the specified time period, or if the approval is withdrawn in accordance with subsection (3) of this rule, the department may allow the source or modification up to an additional 3 years to meet the requirement for the application of best available control technology through use of a demonstrated system of control. (History: Sec. 75-2-111, 75-2-203, MCA; IMP, Sec. 75-2-202, 75-2-203, MCA; NEW, 1983 MAR p. 71, Eff. 1/28/83.)

16.8.940 SOURCES IMPACTING FEDERAL CLASS I AREA-ADDITIONAL REQUIREMENTS (1) The board hereby adopts and incorporates by reference ARM 16.8.1107(2) which sets forth the provisions for public notice of the submittal of an application for an air quality permit, notice of the department's preliminary determination on the application for the air quality permit, and the public comment period. A copy of ARM 16.8.1107(2) may be obtained from the Air Quality Bureau, Department of Health and Environmental Sciences, Cogswell Building, Helena, Montana, 59620.

(2) Federal land managers may present to the department, after preliminary determination required under ARM 16.8.1107(2), a demonstration that the emissions from the proposed source or modification would have an adverse impact on the air quality-related values, including visibility, of any federal Class I lands, notwithstanding that the change in air quality resulting from emissions from such source or modification would not cause or contribute to concentrations which would exceed the maximum allowable increases for a Class I area. If the department concurs with such demonstration, the department may not issue the permit. (History: Sec. 75-2-111, 75-2-203, MCA; IMP, Sec. 75-2-202, 75-2-203, MCA; NEW, 1983 MAR p. 71, Eff. 1/28/83.)

16.8.941 CLASS I VARIANCES -- GENERAL (1) The owner or operator of a proposed major stationary source or major modification may demonstrate to the federal land manager that the emissions from such source or modification would have no significant adverse impact on the air quality-related values of Class I lands under the federal land manager's jurisdiction, including visibility, notwithstanding that the change in air quality resulting from emissions from such source or modification would cause or contribute to concentrations which would exceed the maximum allowable increases for a Class I area. If the federal land manager concurs with such demonstration and so certifies to the department, the department may, provided that applicable requirements are otherwise met, issue the permit with such emission limitations as may be necessary to assure that emissions of sulfur dioxide and particulate matter would not exceed the following maximum allowable increases over baseline concentration for such pollutants:

Maximum allowable increase  
(micrograms per cubic meter)

- |                          |     |
|--------------------------|-----|
| (a) Particulate matter:  |     |
| Annual geometric mean    | 19  |
| Twenty-four hour maximum | 37  |
| (b) Sulfur dioxide:      |     |
| Annual arithmetic mean   | 20  |
| Twenty-four hour maximum | 91  |
| Three-hour maximum       | 325 |

(History: Sec. 75-2-111, 75-2-203, MCA; IMP, Sec. 75-2-202, 75-2-203, MCA; NEW, 1983 MAR p. 71, Eff. 1/28/83.)

16.8.942 CLASS I SULFUR DIOXIDE VARIANCE (1) The owner or operator of a proposed major stationary source or major modification which cannot be approved under ARM 16.8.941 may demonstrate to the governor that the source or modification cannot be constructed by reason of any maximum allowable increase for sulfur dioxide for periods of 24 hours or less applicable to any Class I area and, in the case of federal mandatory Class I areas, that a variance under this section would not significantly adversely affect the air quality-related values of the area, including visibility.

(2) The governor, after consideration of the federal land manager's recommendation, if any, and subject to his concurrence, may grant, after notice and an opportunity for a public hearing, a variance from such maximum allowable increase. If such variance is granted, the department may issue a permit to such source or modification provided that the applicable requirements of ARM 16.8.943 are otherwise met.

(3) The recommendations of the governor and the federal land manager must be transferred to the President in any case where the governor recommends a variance in which the federal

land manager does not concur. If the President approves the variance, the department may issue a permit, provided that the applicable requirements of ARM 16.8.943 are otherwise met. (History: Sec. 75-2-111, 75-2-203, MCA; IMP, Sec. 75-2-202, 75-2-203, MCA; NEW, 1983 MAR p. 71, Eff. 1/28/83.)

16.8.943 EMISSION LIMITATIONS FOR PRESIDENTIAL OR GUBERNATORIAL VARIANCE (1) In the case of a permit issued under ARM 16.8.942, the source or modification must comply with emission limitations as may be necessary to assure that emissions of sulfur dioxide from the source or modification would not, during any day on which the otherwise applicable maximum allowable increases are exceeded, cause or contribute to concentrations which would exceed the following maximum allowable increases over the baseline concentration and to assure that such emissions would not cause or contribute to concentrations which exceed the otherwise applicable maximum allowable increases for periods of exposure of 24 hours or less for more than 18 days, not necessarily consecutive, during any annual period:

Maximum Allowable Increase (Micrograms per cubic meter) Period of exposure:	Terrain Areas	
	Low	High
Twenty-four hour maximum	36	62
Three-hour maximum	130	221

(History: Sec. 75-2-111, 75-2-203, MCA; IMP, Sec. 75-2-202, 75-2-203, MCA; NEW, 1983 MAR p. 71, Eff. 1/28/83.)

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## Sub-Chapter 10

## Visibility Impact Assessment

16.8.1001 APPLICABILITY -- VISIBILITY REQUIREMENTS

(1) This sub-chapter is applicable to the owner or operator of a proposed major stationary source as defined by ARM 16.8.921(22) or of a source proposed for a major modification as defined by ARM 16.8.921(21) proposing to construct such a source or modification after July 1, 1985, in any area within the state of Montana designated as attainment, unclassified, or nonattainment in accordance with 40 CFR 81.327. The requirements of this sub-chapter shall be integrated with the requirements of Administrative Rules of Montana Title 16, Chapter 8, Sub-chapters 9 (PSD) and 11 (Permits).

(2) The board hereby adopts and incorporates by reference section 40 CFR 81.327 which is a federal agency rule setting forth attainment status designation for Montana pursuant to section 107 of the Federal Clean Air Act. A copy of 40 CFR 81.327 may be obtained from the Air Quality Bureau, Department of Health and Environmental Sciences, Cogswell Building, Capitol Station, Helena, Montana 59620. (History: Sec. 75-2-111, 75-2-203 MCA; IMP, Sec. 75-2-203, 75-2-204, and 75-2-211 MCA; NEW, 1985 MAR p. 1326, Eff. 9/13/85.)

16.8.1002 DEFINITIONS For the purposes of this sub-chapter:

(1) "Federal Class I area" means those areas listed in ARM 16.8.923(2) and any other federal land that is classified or reclassified as Class I.

(2) "Adverse impact on visibility" means visibility impairment which the department determines does or is likely to interfere with the management, protection, preservation, or enjoyment of the visual experience of visitors within a federal Class I area. The determination must be made on a case-by-case basis taking into account the geographic extent, intensity, duration, frequency, and time of visibility impairment, and how these factors correlate with times of visitor use of the federal Class I area, and the frequency and occurrence of natural conditions that reduce visibility.

(3) "Visibility impairment" means any humanly perceptible change in visual range, contrast or coloration from that which would have existed under natural conditions. Natural conditions include fog, clouds, windblown dust from natural sources, rain, naturally ignited wildfires, and natural aerosols. (History: Sec. 75-2-111, 75-2-203 MCA; IMP, Sec. 75-2-203, 75-2-204, 75-2-211 MCA; NEW, 1985 MAR p. 1326, Eff. 9/13/85.)

16.8.1003 VISIBILITY IMPACT ANALYSIS (1) The owner or operator of a major stationary source or modification as described in ARM 16.8.1001 shall demonstrate that the actual emissions [as defined by ARM 16.8.921(2)] from the major source or modification (including fugitive emissions) shall not cause or contribute to adverse impact on visibility within any federal Class I area or the department shall not issue a permit.

(2) The owner or operator of a proposed major stationary source or major modification shall submit all information necessary to support any analysis or demonstration required by these rules pursuant to ARM 16.8.1105. (History: Sec. 75-2-111, 75-2-203 MCA; IMP, Sec. 75-2-203, 75-2-204, 75-2-211 MCA; NEW, 1985 MAR p. 1326, Eff. 9/13/85.)

16.8.1004 VISIBILITY MODELS (1) All estimates of visibility impact required under this sub-chapter shall be based on those models contained in "Workbook for Estimating Visibility Impairment" (EPA-450/4-80-031, November, 1980). Equivalent models may be substituted if approved by the department.

(2) The board hereby adopts and incorporates by reference "Workbook for Estimating Visibility Impairment" (EPA-450/4-80-031, November, 1980) which is a federal agency publication setting forth methods by which estimates of visibility impairment may be made. A copy of "Workbook for Estimating Visibility Impairment" (EPA-450/4-80-031, November, 1980) may be obtained from the Air Quality Bureau, Department of Health and Environmental Sciences, Cogswell Building, Capitol Station, Helena, Montana 59620. (History: Sec. 75-2-111, 75-2-203 MCA; IMP, Sec. 75-2-203, 75-2-204, 75-2-211 MCA; NEW, 1985 MAR p. 1326, Eff. 9/13/85.)

16.8.1005 NOTIFICATION OF PERMIT APPLICATION (1) Where a proposed major stationary source or major modification will impact or may impact visibility within a federal Class I area, the department shall provide written notice to the Environmental Protection Agency and to the appropriate federal land managers. Notification shall be in writing, include all information relevant to the permit application including an analysis of the anticipated impacts on visibility in any federal Class I area, and be within 30 days of the receipt of the application.

(2) Where the department receives advance notification of a permit application of a source that may affect federal Class I area visibility, the department will notify all affected federal land managers within 30 days of such advance notice. (History: Sec. 75-2-111, 75-2-203 MCA; IMP, Sec. 75-2-203, 75-2-204, 75-2-211 MCA; NEW, 1985 MAR p. 1326, Eff. 9/13/85.)



16.8.1006 ADVERSE IMPACT AND FEDERAL LAND MANAGER

(1) Federal land managers may present to the department, after the preliminary determination required under ARM 16.8.1107(2), a demonstration that the emissions from the proposed source or modification may cause or contribute to adverse impact on visibility in any federal Class I area, notwithstanding that the air quality change resulting from the emissions from such source or modification would not cause or contribute to concentrations which would exceed the maximum allowable increment defined in ARM 16.8.925 (PSD) for a federal Class I area.

(2) The department will consider the comments of the federal land manager in its determination of whether adverse impact on visibility may result. Should the department determine that such impairment may result, a permit for the proposed source will not be granted.

(3) Where the department finds such an analysis does not demonstrate to the satisfaction of the department that an adverse impact on visibility will result, the department will provide written notification to the affected federal land manager within 5 days of the department's final decision on the permit. The notification will include an explanation of the department's decision or give notice as to where the explanation can be obtained. (History: Sec. 75-2-111, 75-2-203 MCA; IMP, Sec. 75-2-203, 75-2-204, 75-2-211 MCA; NEW, 1985 MAR p. 1326, Eff. 9/13/85.)

16.8.1007 VISIBILITY MONITORING (1) The owner or operator of a proposed major stationary source or major modification shall submit with the application an analysis of existing visibility in or immediately adjacent to the federal Class I area potentially impacted by the proposed project. The validity of the analysis shall be determined by the department.

(2) As necessary to establish visibility conditions within the mandatory Class I area prior to construction and operation of the source or modification, the analysis shall include a collection of continuous visibility monitoring data. Such data shall relate to and shall have been gathered over the year preceding receipt of the complete application, except that if the department determines that a complete and adequate analysis can be accomplished with monitoring data gathered over a period shorter than one year, the data that is required must have been gathered over at least that shorter period. Where applicable, the owner or operator may demonstrate that existing visibility monitoring data may be sufficient.

(3) Pursuant to the requirements of this sub-chapter, the owner or operator of the source shall submit a preconstruction visibility monitoring plan prior to the filing of a permit application. Within 30 days, the department must,

after consultation with the affected federal land manager, review and either approve the monitoring program or specify the changes necessary for approval. If the department fails to act within the 30 days, the monitoring program shall be deemed approved.

(4) The owner or operator of a proposed major stationary source or major modification, after construction has been completed, shall conduct such visibility monitoring as the department may require as a permit condition to establish the effect the source has on visibility conditions within the mandatory Class I area being impacted.

(5) The department may waive the requirements of ARM 16.8.1007(1), (2), and (3) if the value of "V" in the equation below is less than 0.50 or, if for any other reason which can be demonstrated to the satisfaction of the department, an analysis of visibility is not necessary.

$$V = (\text{Emissions})^{\frac{1}{2}} \div \text{Distance}$$

where: Emissions = emissions from the major stationary source or modification of nitrogen oxides, particulate matter, or sulfur dioxide, whichever is highest, in tons per year.

Distance = distance, in kilometers, from the proposed major stationary source or major modification to each federal Class I area.

(History: Sec. 75-2-111, 75-2-203 MCA; IMP, Sec. 75-2-203, 75-2-204, MCA; NEW, 1985 MAR p. 1326, Eff. 9/13/85; AMD, 1988 MAR p. 826, Eff. 4/29/88.)

16.8.1008 ADDITIONAL IMPACT ANALYSIS The owner or operator of a proposed major stationary source or major modification subject to the requirements of ARM 16.8.935 (PSD) shall provide a visibility impact analysis of the visibility impact likely to occur as a result of the major source or major modification and as a result of general commercial, residential, industrial, and other growth associated with the source or major modification. (History: Sec. 75-2-111, 75-2-203 MCA; IMP, 75-2-203, 75-2-204, 75-2-211 MCA; NEW, 1985 MAR p. 1326, Eff. 9/13/85.)

## Sub-Chapter 11

## Permit, Construction and Operation of Air Contaminant Sources

16.8.1101 DEFINITIONS For the purpose of this subchapter:

(1) "New or altered source or stack" means a source or stack associated with a source which has not been constructed or upon which construction has not commenced prior to March 16, 1979. However, if the owner or operator of a source or stack has not commenced construction prior to March 16, 1979, but the owner or operator has received a permit from the department or the board, then the source or stack shall not be considered a new or altered source or stack.

(2) "Existing source or stack" means a source or stack associated with a source which is in existence and operating or capable of being operated or which has a permit from the department or the board on March 16, 1979.

(3) "Owner or operator" means the owner of a source or stack associated with a source or the authorized agent of the owner, or the person who is responsible for the overall operation of the source or stack.

(4) "Construct" or "construction" means on-site fabrication, erection or installation of a source or control equipment, including a reasonable period for startup and shakedown.

(5) "Best available control technology" means an emission limitation (including a visible emission standard), based on the maximum degree of reduction for each pollutant subject to regulation under the federal Clean Air Act as amended August 7, 1977 or the Montana Clean Air Act, which would be emitted from any proposed stationary source or modification which the department, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for such source or modification through application of production processes or available methods, systems, and techniques, including fuel cleaning or treatment or innovative fuel combustion techniques for control of such contaminant. In no event shall application of the best available control technology result in emission of any contaminant which would exceed the emissions allowed by any applicable standard under ARM 16.8.1423 and 16.8.1424. If the department determines that technological or economic limitations on the application of measurement methodology to a particular class of sources would make the imposition of an emission standard infeasible, it may instead prescribe a design, equipment, work practice or operational standard or combination thereof, to require the application of best available control technology. Such standard shall, to the degree possible, set forth the emission reduction



achievable by implementation of such design, equipment, work practice or operation and shall provide for compliance by means which achieve equivalent results.

(6) The term "lowest achievable emission rate" means for any source, that rate of emissions which reflects:

(a) the most stringent emission limitation which is contained in the implementation plan of any state for such class or category of source, unless the owner or operator of the proposed source demonstrates that such limitations are not achievable, or

(b) the most stringent emission limitation which is achieved in practice by such class or category of source, whichever is more stringent. In no event shall the application of this term permit a proposed new or modified source to emit any pollutant in excess of the amount allowable under applicable new source standards of performance under ARM 16.8.1423 and 16.8.1424.

(7) "Potential to emit" means the capability of a source at maximum design capacity to emit any air pollutant after application of air pollution control equipment. Any enforceable permit condition or regulations which limit hours of operation, the type or amount of material combusted, stored, or processed, or other emissions limiting factors, is treated as part of its design. Secondary emissions are not included in determining the potential to emit of a stationary source.

(8) "Secondary emissions" means emissions which would occur as a result of the construction or operation of a stationary source, but do not come from the stationary source itself. Secondary emissions must be specific, well defined, quantifiable, and impact the same general area as the stationary source which causes the secondary emissions. Secondary emissions may include, but are not limited to:

(a) Emissions from trains coming to or from the stationary source;

(b) Emissions from any off-site support facility which would not otherwise be constructed or increase its emissions as a result of the construction or operation of the stationary source.

(9) "Major emitting facility" means a stationary source or stack associated with a source which directly emits, or has the potential to emit, 100 tons per year of any air pollutant, including fugitive emissions, regulated under the Montana Clean Air Act. (History: Sec. 75-2-111, 75-2-204, MCA; IMP, Sec. 75-2-204, 75-2-211, MCA; NEW, 1979 MAR p. 224, Eff. 3/16/79; AMD, 1985 MAR p. 1326, Eff. 9/13/85; AMD, 1987 MAR p. 159, Eff. 2/14/87.)

16.8.1102 WHEN PERMIT REQUIRED -- EXCLUSIONS (1) Except as hereafter specified, no person shall construct, install, alter or use any air contaminant source or stack associated with any source without first obtaining a permit from the department or the board. A permit shall not be required for the following:

(a) Residential, institutional, and commercial fuel burning equipment of less than:

(i) 10,000,000 BTU/hr heat input if burning liquid or gaseous fuels, or

(ii) 5,000,000 BTU/hr heat input if burning solid fuel;

(b) residential and commercial fireplaces, barbecues and similar devices for recreational, cooking or heating use;

(c) motor vehicles, trains, aircraft and other such self-propelled vehicles;

(d) laboratory equipment used exclusively for chemical or physical analysis;

(e) food service establishments;

(f) any activity or equipment associated with the use of agricultural land or the planting, production, harvesting or storage of agricultural crops (this exclusion does not apply to the processing of agricultural products by commercial businesses);

(g) ventilating systems used in buildings to house animals;

(h) emergency equipment installed in hospitals or other public institutions or buildings for use when the usual sources of heat, power and lighting are temporarily unobtainable;

(i) any activity or equipment associated with the construction, maintenance, alteration or use of roads, except for stationary sources, including but not limited to, rock crushers and asphalt plants, and roads associated with a source that is otherwise required to obtain a permit under this subchapter;

(j) agricultural and forest prescription fire activities (the adoption of this exclusion does not exempt such activities from regulation under ARM 16.8.1301 through 16.8.1307, Open Burning Restrictions);

(k) drilling rig stationary engine and turbines which do not have the potential to emit more than 100 tons per year of any pollutant regulated under the Montana Clean Air Act;

(l) all other sources and stacks not specifically excluded which do not have the potential to emit more than 25 tons per year of any pollutant, other than lead, for which a rule has been adopted in this chapter;

(m) a new stack or other source of airborne lead contamination whose potential to emit lead is less than 5 tons per year; and

(n) an alteration or modification of an already constructed stack or other source of lead contamination which

results in an increase in the maximum potential of the source or stack to emit airborne lead contaminants by an amount less than 0.6 tons per year;

(o) asphalt concrete plants and mineral crushers which do not have the potential to emit more than 5 tons of any pollutant, other than lead, for which a rule has been adopted in this chapter. (History: Sec. 75-2-111, 75-2-204 MCA; IMP, Sec. 75-2-204, 75-2-211 MCA; NEW, 1979 MAR p. 224, Eff. 3/16/79; AMD, 1982 MAR p. 697, Eff. 4/16/82; AMD, 1984 MAR p. 503, Eff. 3/30/84; AMD, 1985 MAR p. 1326, Eff. 9/13/85; AMD, 1987 MAR p. 159, Eff. 2/14/87.)

16.8.1103 EMISSION CONTROL REQUIREMENTS (1) The owner or operator of a new or altered source for which an air quality permit is required by this subchapter shall install on the new or altered source the maximum air pollution control capability which is technically practicable and economically feasible, except that:

(a) best available control technology shall be utilized; and

(b) the lowest achievable emission rate shall be met to the extent and by such sources as may be required by the Federal Clean Air Act, as amended on August 7, 1977. All



equipment shall be operated to provide the maximum air pollution control for which it was designed. (History: Sec. 75-2-111, 75-2-204, MCA; IMP, Sec. 75-2-204, 75-2-211, MCA; NEW, 1979 MAR p. 224, Eff. 3/16/79.)

16.8.1104 EXISTING SOURCES AND STACKS -- PERMIT APPLICATION REQUIREMENTS (1) The owner or operator of an existing source or stack which was not in existence on November 23, 1968, shall apply for an air quality permit on or before January 1, 1981. This subsection does not relieve the owner or operator of an existing source or stack from complying with the application requirements of ARM 16.8.1105 if the owner or operator intends to alter, reconstruct or use the existing source or stack in a manner that would require the submission of an application for an air quality permit for a new or altered source or stack.

(2) The owner or operator of an existing source for which an air quality permit is required by this sub-chapter shall apply for an air quality permit on forms available from the department and shall be subject to the signature requirements of ARM 16.8.1105(1). The information to be submitted shall include the following:

(a) Any information described in ARM 16.8.1105(2) which was not submitted as a part of any previous permit application reviewed by the department;

(b) Any information relating to the matters described in ARM 16.8.1105(2) which has changed or is no longer applicable; and

(c) A certification by the applicant that the source or stack is being operated in compliance with the conditions of an existing permit if one has been issued.



(3) Nothing in this rule shall require an applicant to submit information already filed with the department. If the applicant believes information has already been submitted to the department, the applicant shall so indicate and, wherever possible, shall specify the date upon which the information was submitted. Any information so submitted shall be considered part of the application. (History: Sec. 75-2-111, 75-2-204, MCA; IMP Sec. 75-2-204, 75-2-211, MCA; NEW, 1979 MAR p. 224; Eff. 3/16/79.)

16.8.1105 NEW OR ALTERED SOURCES AND STACKS -- PERMIT APPLICATION REQUIREMENTS (1) The owner or operator of a new or altered source shall, not later than 180 days before construction begins, or if construction is not required not later than 120 days before installation, alteration or use begins, submit an application for an air quality permit on an application form provided by the department. The air quality permit, if granted, shall authorize the construction and operation of the source subject to the conditions in the permit and to the requirements of this sub-chapter. The application form shall contain a certification by the person signing the application that all information contained therein is true. An unsigned or improperly signed application shall be considered incomplete. The following persons are authorized to sign an application on behalf of the owner or operator of a new or altered source or stack:

(a) An application submitted by a corporation must be signed by a principal executive officer of at least the level of vice president, or his authorized representative, if that representative is responsible for the overall operation of the source or stack;

(b) An application submitted by a partnership or a sole proprietorship must be signed by a general partner or the proprietor respectively;

(c) An application submitted by a municipal, state, federal or other public agency shall be signed by either a principal executive officer, appropriate elected official or other duly authorized employee; and

(d) An application submitted by an individual must be signed by the individual or his authorized agent.

(2) The application for an air quality permit to construct a new or altered source or stack shall include the following:

(a) A map and diagram showing the location of the proposed new or altered source and each stack associated with the source, the property involved, the height and outline of the buildings associated with the new or altered source, and the height and outline of each stack associated with the new or altered source;



(b) A description of the new or altered source including data on expected production capacity, raw materials and major equipment components;

(c) A description of the control equipment to be installed;

(d) A description of the composition, volume and temperatures of the effluent stream, including the nature and extent of air contaminants emitted, quantities and means of disposal of collected contaminants, and the air quality relationship of these factors to conditions created by existing sources or stacks associated with the new or altered source or stack;

(e) Normal and maximum operating schedules;

(f) Adequate drawings, blueprints, specifications or other information to show the design and operation of the equipment involved;

(g) Process flow diagrams containing material balances;

(h) A detailed schedule of construction or alteration of the source or stack;

(i) A description of the shakedown procedures and time frames that will be used at the source or stack; and

(j) Such other information requested by the Department which is necessary to review the application and determine whether the new or altered source will comply with applicable standards and rules.

(3) The owner or operator of a new or altered source shall, before construction is scheduled to end as specified in the air quality permit, submit additional information on a form provided by the department. The information to be submitted shall include the following:

(a) Any information relating to the matters described in subsection (2) of this rule which has changed or is no longer applicable; and

(b) A certification by the applicant that the new or altered source or stack has been constructed in compliance with the air quality permit.

(4) Nothing in this subsection shall require an applicant to submit information already filed with the department. If the applicant believes information has already been submitted to the department, the applicant shall so indicate and, wherever possible, shall specify the date upon which the information was submitted. Any information so submitted shall be considered part of the application. (History: Sec. 75-2-111, 75-2-204, MCA; IMP Sec. 75-2-204, 75-2-211, MCA; NEW, 1979 MAR p. 224; Eff. 3/16/79.)

Rule 16.8.1106 reserved

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16.8.1107 PUBLIC REVIEW OF PERMIT APPLICATIONS

(1) Where an application for a permit requires the compilation of an environmental impact statement under the Montana Environmental Policy Act, the procedures for public review shall be those required by the Montana Environmental Policy Act and the rules adopted by the board and department to implement the act, ARM 16.2.601 through 16.2.706.

(2) With the exception of those permit applications subjected to subsection (4) below, where the application for a permit does not require the compilation of an environmental impact statement, an application shall be deemed to be complete and filed on the date the department received it unless the department notifies the applicant in writing within 30 days thereafter that it is incomplete. The notice shall list the reasons why the application is considered incomplete and shall specify the date by which any additional information requested shall be submitted. If the information is not submitted as required, the application shall be considered withdrawn unless the applicant requests in writing an extension of time for submission of the additional information. The application is complete and filed on the date the required additional information is received.

(a) The applicant shall notify the public, by means of legal publication in a newspaper of general circulation in the area affected by the application of its application for permit. The notice shall be made not sooner than 10 days prior to submittal of an application nor later than 10 days after submittal of an application. Form of the notice shall be provided by the department.

(b) Within 40 days after receiving a complete and filed application for a permit, the department shall make a preliminary determination whether the permit should be issued, issued with conditions or denied; and

(c) After making a preliminary determination, the department shall notify those members of the public who requested such notification subsequent to the notice required by subsection (2)(a) of this rule and the applicant of the department's preliminary determination. The notice shall specify that comments may be submitted on the information submitted by the applicant and the department's preliminary determination to issue, issue with conditions or deny the permit. The notice shall also specify the following:

(i) Where a complete copy of the application and the department's analysis of the applicant can be reviewed. One copy of this material shall be made available for inspection by the public in the air quality control region where the source or stack is located.

(ii) A date by which all comments on the department's preliminary determination must be submitted in writing within 15 days after notice is mailed.

(iii) Notwithstanding the opportunity for public comment, a final decision must be made within 60 days after a completed and filed application is submitted to the department as required by Section 75-2-211, MCA. The notice shall specify the date upon which the 60 day period expires, the person from whom a copy of the final decision may be obtained, and the procedure for requesting a hearing before the board concerning the department's decision.

(3) Where a permit application has been filed for a source defined as a major stationary source under ARM 16.8.921(22) or as a major modification under ARM 16.8.921(21), the following additional requirements shall be met:

(a) The department shall advertise in a newspaper of general circulation in the air quality control region affected by the proposed source or stack that an application has been received, the preliminary determination made by the department, the degree of increment consumption that is expected from the source or stack, how written comments may be submitted, and how the final determination of the department may be appealed to the board; and

(b) The department shall send a copy of the notice of public comment to the applicant, the Region VIII Administrator of the Environmental Protection Agency and to officials and agencies having cognizance over the location where the proposed construction would occur as follows: any other state or local air pollution control agencies, the governing body of the city and county where the source or stack would be located; any comprehensive regional land use planning agency, and any state, federal land manager, or Indian governing body whose lands may be affected by emissions from the source or stack.

(c) When the department receives advance notification of a permit application of a major stationary source or major modification, it shall notify all affected federal land managers within 30 days of such advance notification.

(4) If an application for an air quality permit is also an application for certification under the terms of the Major Facility Siting Act, public review is governed by the terms of ARM 16.2.501, 16.2.502, and 16.2.503. (History: Sec. 75-2-111, 75-2-204, 75-20-216(3), MCA; IMP, Sec. 75-2-204, 75-2-211, 75-20-216(3), MCA; NEW, 1979 MAR p. 224, Eff. 3/16/79; AMD, 1980 MAR p. 3119, Eff. 12/27/80; AMD, 1985 MAR p. 1326, Eff. 9/13/85.)

Rule 16.8.1108 reserved



16.8.1109 CONDITIONS FOR ISSUANCE OF PERMIT (1) Any permit issued under the provisions of this subchapter may be issued with such conditions as are necessary to assure compliance with all applicable rules and standards.

(2) An air quality permit to construct may not be issued to a new or altered source unless the applicant demonstrates that the source or stack can be expected to operate in compliance with the standards and rules adopted under the Montana Clean Air Act and the applicable regulations and requirements of the Federal Clean Air Act.

(3) A new or altered source shall not commence operation unless the information submitted by the applicant demonstrates that construction has occurred in compliance with the permit and that the source can operate in compliance with applicable rules and standards of the permit.

(4) An air quality permit shall be issued to an existing source unless the department demonstrates that the source does not operate in compliance with applicable rules or standards or an existing permit granted by the board or department.

(5) Commencement of construction or operation under any permit containing conditions shall be deemed acceptance of all conditions so specified, provided that nothing contained herein shall affect the right of the permittee to appeal the imposition of conditions to the board as provided in Section 75-2-211, MCA.

(6) Any owner or operator of a new or altered source or stack proposing construction or alteration within any area designated as non-attainment in 40 CFR 81.327 for any air contaminant must demonstrate that all major emitting facilities, owned or operated by such persons, or by an entity controlling, controlled by, or under common control with such persons, are subject to emission limitations and are in compliance, or on a schedule for compliance, with all applicable air quality emission limitations and standards contained in this chapter.

(7) An air quality permit for a new or altered source or stack may be issued in an area designated as non-attainment in 40 CFR 81.327 only if the applicable implementation plan approved in 40 CFR Part 52, Subpart BB is being carried out for the non-attainment area in which the proposed source is to be constructed or altered.

(8) Any owner or operator proposing to construct or alter a stationary source in any area designated as non-attainment must comply with the requirements of 40 CFR 51.18(j) as appropriate. The board hereby adopts and incorporates by reference 40 CFR Part 52, Subpart BB, which is a federal agency regulation describing Montana's state implementation plan for control of air pollution in Montana; 40 CFR 81.327, which is a federal agency regulation setting forth air quality attainment status designations for the state of Montana; and 40 CFR 51.18(j),

which sets forth the permit requirements for new or altered sources proposed to be constructed or altered in any non-attainment area. Copies of 40 CFR Part 52, Subpart BB, 40 CFR 81.327, and 40 CFR 51.18(j) may be obtained from the Air Quality Bureau, Department of Health and Environmental Sciences, Cogswell Building, Helena, Montana 59620. (History: Sec. 75-2-111, 75-2-204, MCA; IMP, Sec. 75-2-204, 75-2-211, MCA; NEW, 1979 MAR p. 224, Eff. 3/16/79; AMD, 1982 MAR p. 1201, Eff. 6/18/82; AMD, 1985 MAR p. 1326, Eff. 9/13/85; AMD, 1987 MAR p. 159, Eff. 2/14/87.)

16.8.1110 DENIAL OF PERMIT (1) If the department denies the issuance of an air quality permit it shall:

(a) Notify the applicant in writing of the reasons why the permit is being denied and advise the applicant of his right to appeal the department's decision to the board as provided in section 75-2-211, MCA. Service of the department's decision to deny the permit shall be made as provided in the Montana Rules of Civil Procedure except that the applicant may agree by written acknowledgement to service by mail; and

(b) Refuse to accept any further application from the applicant for that particular project until:

(i) The period for appeal to the board has expired;

(ii) The board has rendered a final decision in the matter if an appeal is undertaken; or

(iii) The applicant has agreed to adequately address the reasons for denial. (History: Sec. 75-2-111, 75-2-204, MCA; IMP Sec. 75-2-204, 75-2-211, MCA; NEW, 1979 MAR p. 224, Eff. 3/16/79.)



16.8.1111 DURATION OF PERMIT (1) An air quality permit shall be valid until revoked or modified as provided in this subchapter, except that a permit issued prior to construction of a new or altered source may contain a condition providing that the permit will expire unless construction is commenced within the time specified in the permit, which in no event may be less than one year after the permit is issued. (History: Sec. 75-2-111, 75-2-204, MCA; IMP Sec. 75-2-204, 75-2-211, MCA; NEW, 1979 MAR p. 224, Eff. 3/16/79.)

16.8.1112 REVOCATION OF PERMIT (1) An air quality permit may be revoked for violations of any condition of a permit, rule, or standard adopted pursuant to the Clean Air Act of Montana, applicable Federal Clean Air Act regulation, or any provisions of the Montana Clean Air Act or applicable provisions of the Federal Clean Air Act. The department shall notify the permittee of its intent to revoke the permit in writing. Service of the department's intention to revoke shall be made as provided in ARM 16.8.1110. The department's decision to revoke a permit shall become final within 15 days after service of the notice unless the permittee requests a hearing before the board. The hearing and judicial review of the board's decision shall be governed by the Montana Administrative Procedure Act. The filing of a request for a hearing postpones the effective date of the department's decision to revoke the permit until the conclusion of the hearing and issuance of a final decision by the board. (History: Sec. 75-2-111, 75-2-204, MCA; IMP Sec. 75-2-204, 75-2-211, MCA; NEW, 1979 MAR p. 224, Eff. 3/16/79.)

16.8.1113 MODIFICATION OF PERMIT (1) An air quality permit may be modified for the following reasons:

(a) changes in any applicable rules and standards adopted by the board; or

(b) changed conditions of operation at a source or stack which do not result in an increase in emissions because of the changed conditions of operation. A source may not increase its emissions beyond those found in its permit unless the source applies for and receives another permit in accordance with the procedures found in ARM 16.8.1103 through 16.8.1109 and with all applicable requirements in Title 16, chapter 8, subchapter 9.

(2) The department shall notify the permittee in writing of any proposed modifications of the permit. Service of the department's intention to modify shall be made as provided in ARM 16.8.1110. The permit shall be deemed modified in accordance with the notice within 15 days after service of the notice unless the permittee requests a hearing before the board. The hearing and judicial review of the board's decision shall

be governed by the Montana Administrative Procedure Act. The filing of a request for a hearing postpones the effective date of the modifications to the permit until the decision of the board becomes final or judicial review has been concluded. (History: Sec. 75-2-111, 75-2-204, MCA; IMP, Sec. 75-2-204, 75-2-211, MCA; NEW, 1979 MAR p. 224, Eff. 3/16/79; AMD, 1987 MAR p. 159, Eff. 2/14/87.)

16.8.1114 TRANSFER OF PERMIT (1) An air quality permit may be transferred from one location to another if:

(a) written notice of intent to transfer location is sent to the department, along with documentation that the permittee has published notice of the intended transfer by means of a legal publication in a newspaper of general circulation in the area to which the transfer is to be made, such notice including the statement that public comment will be accepted for 15 days after the date of publication by the Air Quality Bureau, Cogswell Building, Helena, Montana 59620;

(b) the source will operate in the new location for a period less than one year; and

(c) the source will not have any significant impact as defined by 40 CFR Part 51, Appendix S, Section IIIA, upon any non-attainment area as defined by 40 CFR 81.327 nor upon any of the following areas:

- (i) Bob Marshall Wilderness Area;
- (ii) Anaconda Pintler Wilderness Area;
- (iii) Cabinet Mountains Wilderness Area;
- (iv) Gates of the Mountains Wilderness Area;
- (v) Glacier National Park;
- (vi) Medicine Lake Wilderness Area;
- (vii) Mission Mountains Wilderness Area;
- (viii) Red Rock Lake Wilderness Area;
- (ix) Scapegoat Wilderness Area;
- (x) Selway-Bitterroot Wilderness Area;
- (xi) UL Bend Wilderness Area;
- (xii) Yellowstone National Park;
- (xiii) Northern Cheyenne Reservation;
- (xiv) Flathead Reservation;
- (xv) Fort Peck Reservation.

(2) An air quality permit may be transferred from one person to another if written notice of intent to transfer, including the names of the transferor and the transferee, is sent to the department.

(3) The department will approve or disapprove a permit transfer within 30 days after receipt of a complete notice of intent as described in subsections (1)(a) or (2) above.

(4) The board hereby adopts and incorporates by reference 40 CFR 81.327, which sets forth air quality attainment status designations for the state of Montana; and 40 CFR Part 51,

Appendix S, Section IIIA, which is a federal agency regulation that sets forth the definition of "significance levels" when applied to sources impacting various areas. Copies of this federal regulatory material may be obtained from the Air Quality Bureau, Department of Health and Environmental Sciences, Cogswell Building, Helena, Montana 59620. (History: Sec. 75-2-111, 75-2-204, MCA; IMP, Sec. 75-2-204, 75-2-211, MCA; NEW, 1979 MAR p. 224, Eff. 3/16/79; AMD, 1982 MAR p. 1482, Eff. 7/30/82; AMD, 1987 MAR p. 159, Eff. 2/14/87.)

16.8.1115 INSPECTION OF PERMIT (1) Air quality permits shall be made available for inspection by the department at the location of the source or stack for which the permit has been issued. (History: Sec. 75-2-111, 75-2-204, MCA; IMP, Sec. 75-2-204, 75-2-211, MCA; NEW, 1979 MAR p. 224, Eff. 3/16/79.)

Rule 16.8.1116 reserved

16.8.1117 COMPLIANCE WITH OTHER STATUTES AND RULES

(1) Nothing in this subchapter shall be construed as relieving any permittee of the responsibility for complying with any applicable federal or Montana statute, rule or standard except as specifically provided in this subchapter. (History: Sec. 75-2-111, 75-2-204, MCA; IMP, Sec. 75-2-204, 75-2-211, MCA; NEW, 1979 MAR p. 224, Eff. 3/16/79.)

16.8.1118 WAIVERS (1) The department may, as specified in section 75-2-211, MCA:

(a) waive the requirements for submittal of information required in an application; and

(b) waive or shorten the time required for the submission of an application. (History: (Sec. 75-2-111, 75-2-204, MCA; IMP, Sec. 75-2-204, 75-2-211, MCA; NEW, 1979 MAR p. 224, Eff. 3/16/79.)



## Sub-Chapter 12

## Stack Heights and Dispersion Techniques

16.8.1201 DEFINITIONS IS REPEALED  
(History: Sec. 75-2-111, 75-2-203, MCA, IMP, Sec. 75-2-203, MCA; NEW, 1978 MAR p. 1729, Eff. 12/29/78; AMD, 1983 MAR p. 277, Eff. 4/1/83; REP, 1986 MAR p. 1021, Eff. 6/13/86.)

16.8.1202 REQUIREMENTS IS REPEALED  
(History: Sec. 75-2-111, 75-2-203, MCA, IMP, Sec. 75-2-203, MCA; NEW, 1978 MAR p. 1729, Eff. 12/29/78; AMD, 1983 MAR p. 277, Eff. 4/1/83; REP, 1986 MAR p. 1021, Eff. 6/13/86.)

16.8.1203 EXCEPTIONS IS REPEALED  
(History: Sec. 75-2-111, 75-2-203, MCA, IMP, Sec. 75-2-203, MCA; NEW, 1978 MAR p. 1729, Eff. 12/29/78; AMD, 1983 MAR p. 277, Eff. 4/1/83; REP, 1986 MAR p. 1021, Eff. 6/13/86.)

16.8.1204 DEFINITIONS For the purposes of this subchapter, the following definitions apply:

(1)(a) "Dispersion technique" means any technique which attempts to affect the concentration of a pollutant in the ambient air by:

(i) using that portion of a stack which exceeds good engineering practice stack height;

(ii) varying the emission of a pollutant according to atmospheric conditions or ambient concentrations of that pollutant; or

(iii) increasing final exhaust gas plume rise by manipulating source process parameters, stack parameters, or combining exhaust gases from several existing stacks into one stack; or other selective handling of exhaust gas streams so as to increase the exhaust gas plume rise.

(b) The term "dispersion technique" does not include:

(i) the reheating of a gas stream, following use of a pollution control system, for the purpose of returning the gas to the temperature at which it was originally discharged from the facility generating the gas stream;

(ii) the merging of gas streams when:

(A) the source owner or operator demonstrates that the facility was originally designed and constructed with such merged gas streams;

(B) after July 8, 1985, such merging is part of a change in operation at the facility that includes the installation of pollution controls and is accompanied by a net reduction in the allowable emissions of a pollutant (this exclusion from the definition of "dispersion technique" applies only to the emission limitation for the pollutant affected by such change in operation); or

(C) before July 8, 1985, such merging is part of a change in operation at the facility that included the installation of emissions control equipment or was carried out for sound economic or engineering reasons. If there was an increase in the emission limitation or, if no emission limitation was in existence prior to the merging, an increase in the quantity of pollutant actually emitted prior to the merging, the department shall presume that merging was significantly motivated by the intent to gain emissions credit for greater dispersion. Absent a demonstration by the source owner or operator that merging was not significantly motivated by such intent, the department shall deny credit for the effects of such merging in calculating the allowable emissions for the source.

(iii) smoke management in agricultural or silvicultural prescribed burning programs;

(iv) episodic restrictions on residential solid-fuel burning and open burning; or

(v) techniques under (1)(a)(iii) of this rule that increase final exhaust gas plume rise when the resulting allowable emissions for sulfur dioxide from the facility do not exceed five thousand (5,000) tons per year.

(2) "Good engineering practice" (GEP) stack height means the greater of:

(a) sixty-five (65) meters, measured from the ground-level elevation at the base of the stack;

(b)(i) for stacks in existence on January 12, 1979, and for which the owner or operator had obtained all applicable permits or approvals required by this chapter,

$$\text{GEP} = 2.5H$$

if the owner or operator produces evidence that this equation was actually relied on in establishing an emission limitation;

(ii) for all other stacks,

$$\text{GEP} = H + 1.5L$$

where: GEP = good engineering practice stack height, measured from the ground-level elevation at the base of the stack,

H = height of nearby structure(s) measured from the ground-level elevation at the base of the stack, and

L = lesser dimension, height or projected width, of nearby structure(s);

however, the department may require the use of a field study or fluid model to verify GEP stack height for the source; or

(c) the height demonstrated by a fluid model or a field study approved by the department that ensures that the emissions from a stack do not result in excessive concentrations of any air pollutant as a result of atmospheric downwash, wakes, or eddy effects created by the source itself, or nearby structures or nearby terrain features.

(3) "Nearby" as used in this subchapter for a specific structure or terrain feature means:

(a) for purposes of applying the formula provided in (2)(b) of this rule, that distance up to five times the lesser of the height or the width dimension of a structure, but not greater than 0.8 kilometers (1/2 mile); and

(b) for purposes of conducting demonstrations under (2)(c) of this rule, not greater than 0.8 kilometers, except that the portion of a terrain feature may be considered to be nearby which falls within a distance of up to ten (10) times the maximum height (Ht) of the feature, not to exceed two (2) miles if the feature achieves a height 0.8 kilometers from the stack that is at least forty percent (40%) of the GEP stack height determined by the formulae provided in (2)(b)(ii) of this rule or twenty-six (26) meters, whichever is greater, as measured from the ground-level elevation at the base of the stack. The height of the structure or terrain feature is measured from the ground-level elevation at the base of the stack.

(4) "Excessive concentration" as used in (2)(c) of this rule means:

(a) For sources seeking credit for stack height exceeding that established under (2)(b) of this rule, a maximum ground-level concentration due to emissions from a stack due in whole or in part to downwash, wakes and eddy effects produced by nearby structures or nearby terrain features that individually is at least forty percent (40%) in excess of the maximum concentration experienced in the absence of such downwash, wakes, or eddy effects and that contributes to a total concentration due to emissions from all sources greater than an ambient air quality standard as provided in subchapter 8. For sources subject to the prevention of significant deterioration program (subchapter 9), an excessive concentration alternatively means a maximum ground-level concentration due to emissions from a stack due in whole or in part to downwash, wakes, or eddy effects produced by nearby structures or nearby terrain features that individually is at least forty percent (40%) in excess of the maximum concentration experienced in the absence of such downwash, wakes, or eddy effects and greater than a prevention of significant deterioration increment. The allowable emission rate to be used in making demonstrations under this part is prescribed by the new source performance standard that is applicable to the source category unless the owner or operator demonstrates to the satisfaction of the department that this emission rate is infeasible. Where such a demonstration has been made, the department shall establish an alternative emission rate after consultation with the source owner or operator.

(b) For sources seeking credit after October 1, 1983,



for increases in existing stack heights up to the heights established under (2)(b) of this rule, either:

(i) a maximum ground-level concentration due in whole or in part to downwash, wakes or eddy effects as provided in subsection (4)(a) of this rule, except that the emission rate specified by any applicable state implementation plan (or, in the absence of such a limit, the actual emission rate as defined in ARM 16.8.921(2)) shall be used, or

(ii) the actual presence of a public nuisance caused by the existing stack, as determined by the department.

(c) For sources seeking credit after January 12, 1979, for a stack height determined under (2)(b) of this rule if the department requires the use of a field study or fluid model to verify GEP stack height, for sources seeking stack height credit after November 9, 1984, based on the aerodynamic influence of cooling towers, and for sources seeking stack height credit after December 31, 1970, based on the aerodynamic influence of structures not adequately represented by the equations in (2)(b) of this rule, a maximum ground-level concentration due in whole or in part to downwash, wakes or eddy effects that is at least forty percent (40%) in excess of the maximum concentration experienced in the absence of such downwash, wakes, or eddy effects. (History: Sec. 75-2-111, 75-2-203, MCA; IMP, Sec. 75-2-203, MCA; NEW, 1986 MAR p. 1021, Eff. 6/13/86.)

16.8.1205 REQUIREMENTS (1) The degree of emission limitation required of any source or stack for control of any air pollutant regulated under the Montana Clean Air Act must not be affected by so much of any source's stack height that exceeds good engineering practice or by any other dispersion technique, except as provided in ARM 16.8.1206.

(2) Before a new or revised state implementation plan emission limitation that is based on good engineering practice stack height that exceeds the height allowed by ARM 16.8.1204 (2)(b)(i) or (ii) is submitted to the Environmental Protection Agency, the department must provide notice and opportunity for public hearing of the availability of any demonstration study as provided by ARM 16.8.1204(2)(c). Such notice and public hearing will be conducted in accordance with the Montana Administrative Procedure Act.

(3) This rule does not require a source owner or operator to restrict, in any manner, the actual stack height of any source. (History: Sec. 75-2-111, 75-2-203, MCA; IMP, Sec. 75-2-203, MCA; NEW, 1986 MAR p. 1021, Eff., 6/13/86.)

16.8.1206 EXEMPTIONS. The requirements of ARM 16.8.1205 do not apply to stack heights in existence or dispersion techniques implemented on or before December 31, 1970, except when

pollutants are being emitted from such stacks or using such dispersion techniques by stationary sources (as defined by ARM 16.8.921(28)) that were constructed or reconstructed or for which major modifications (as defined in ARM 16.8.921(21)) were carried out after December 31, 1970. (History: Sec. 75-2-111, 75-2-203, MCA; IMP, Sec. 75-2-203, MCA; NEW, 1986 MAR p. 1021, Eff. 6/13/86.)

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## Sub-Chapter 13

## Open Burning

16.8.1301 DEFINITIONS (1) "Best available control technology" (BACT) means those techniques and methods of controlling emission of pollutants from an existing or proposed open burning source which limit those emissions to the maximum degree which the department determines, on a case-by-case basis, is achievable for that source, taking into account impacts on energy use, the environment, and the economy, and any other costs, including cost to the source. Such techniques and methods may include the following: scheduling of burning during periods and seasons of good ventilation, applying dispersion forecasts, utilizing predictive modeling results performed by and available from the department to minimize smoke impacts, limiting the amount of burning to be performed during any one period of time, using ignition and burning techniques which minimize smoke production, selecting fuel preparation methods that will minimize dirt and moisture content, promoting fuel configurations which create an adequate air to fuel ratio, prioritizing burns as to air quality impact and assigning control techniques accordingly, and promoting alternative treatments and uses of materials to be burned. In the case of essential agricultural open burning during September or October, or prescribed wildland open burning during September, October, or November, BACT includes burning only during the time periods specified by the department, which may be determined by calling 406 - 449-3454 or a toll-free number available from the county sheriff's office. In the case of wildland open burning during December, January or February, BACT includes burning only during the time periods specified by the department, which may be determined by calling 406 - 449-3454.



(2) "Essential agricultural open burning" means any open burning conducted on a farm or ranch for the purpose of:

(a) Eliminating excess vegetative matter from an irrigation ditch where no reasonable alternative method of disposal is available.

(b) Eliminating excess vegetative matter from cultivated fields after harvest has been completed when no reasonable alternative method of disposal is available.

(c) Improving range conditions when no reasonable alternative method is available.

(d) Improving wildlife habitat when no reasonable alternative method is available.

(3) "Major open burning source" means any person, agency, institution, business, or industry conducting any open burning which on a statewide basis will emit more than 500 tons per calendar year of carbon monoxide or 50 tons per calendar year of any other pollutant regulated under this chapter, except hydrocarbons.

(4) "Minor open burning source" means any person, agency, institution, business, or industry conducting any open burning which is not a major open burning source.

(5) "Open burning" means combustion of any material directly in the open air without a receptacle, or in a receptacle other than a furnace, multiple chambered incinerator, or wood waste burner, with the exception of small recreational fires, construction site heating devices used to warm workers, or safety flares used to dispose of dangerous gases at refineries, gas sweetening plants, or oil and gas wells.

(6) "Prescribed wildland open burning" means any planned open burning, either deliberately or naturally ignited, which is conducted on forest land or relatively undeveloped rangeland for the purpose of:

(a) Improving wildlife habitat.

(b) Improving range conditions.

(c) Promoting forest regeneration.

(d) Reducing fire hazards resulting from forestry practices, including reduction of log deck debris when the log deck is located in close proximity to a timber harvest site.

(e) Controlling forest pests and diseases.

(f) Promoting any other accepted silvicultural practices.

(7) "Salvage operation" means any operation conducted in whole or in part for the salvaging or reclaiming of any product or material, with the exception of the silvicultural practice commonly referred to as a salvage cut.

(8) "Trade wastes" means solid, liquid, or gaseous material resulting from construction or the operation of any business, trade, industry, or demolition project. Wood product industry wastes such as sawdust, bark, peelings, chips, shavings, and cull wood are considered trade wastes.



Trade wastes do not include wastes generally disposed of by essential agricultural open burning and prescribed wildland open burning.

(9) "Wood waste burner" means a device commonly called a tepee burner, silo, truncated cone, wigwam burner, or other similar burner commonly used by the wood products industry for the disposal of wood. (HISTORY: Secs. 75-2-111, 75-2-203, MCA; IMP, Sec. 75-2-203, MCA; NEW 1982 MAR p. 688, Eff. 4/16/82.)

16.8.1302 PROHIBITED OPEN BURNING (1) The board hereby adopts and incorporates by reference 40 Code of Federal Regulations (CFR) Part 261, which identifies and defines hazardous wastes. A copy of 40 CFR Part 261 may be obtained from the Air Quality Bureau, Department of Health and Environmental Sciences, Cogswell Building, Helena, Montana 59620.

(2) The following material may not be disposed of by open burning:

(a) Any waste which is moved from the premises where it was generated, including that moved to a solid waste disposal site, except as provided for in ARM 16.8.1307 or 16.8.1308.

(b) Food wastes.

(c) Styrofoam and other plastics.

(d) Wastes generating noxious odors.

(e) Wood and wood byproducts other than trade wastes, such as papers, cardboard, or tree limbs, unless a public or private garbage hauler, or rural container system, is unavailable.

(f) Poultry litter.

(g) Animal droppings.

(h) Dead animals or dead animal parts.

(i) Tires.

(j) Rubber materials.

(k) Asphalt shingles, except as provided in ARM 16.8.1306.

(l) Tarpaper, except as provided in ARM 16.8.1306.

(m) Automobile bodies and interiors.

(n) Insulated wire, except as provided in ARM 16.8.1306.

(o) Oil or petroleum products, except as provided in ARM 16.8.1306.

(p) Treated lumber and timbers.

(q) Pathogenic wastes.

(r) Hazardous wastes as defined by 40 CFR Part 261.

(s) Trade wastes, except as provided in ARM 16.8.1307 or 16.8.1308.

(t) Any materials resulting from a salvage operation.

(u) Chemicals. (History: Secs. 75-2-111, 75-2-203 MCA; IMP, Sec. 75-2-203 MCA; NEW, 1982 MAR p. 689, Eff. 4/16/82.)

16.8.1303 MINOR OPEN BURNING SOURCE REQUIREMENTS

A minor open burning source need not obtain an air quality open burning permit, but must:

(1) Comply with all rules within this sub-chapter with the exception of ARM 16.8.1304.

(2) Comply with any requirements or regulations relating to open burning established by any agency of local government, including local air pollution agencies established under section 75-2-301, MCA, of the Montana Clean Air Act or any other municipal or county agency responsible for protecting public health and welfare.

(3) If it desires to conduct essential agricultural open burning during September or October or prescribed wildland open burning during September, October or November, adhere to the time periods set for burning by the department and available by calling 406 - 449-3454 or a toll-free number available from the county sheriff's office.

(4) If it desires to conduct prescribed wildland open burning during December, January, or February, adhere to the time periods set for burning by the department and available by calling 406 - 449-3454. (History: Secs. 75-2-111, 75-2-203 MCA; IMP, Sec. 75-2-203 MCA; NEW, 1982 MAR P. 690, Eff. 4/16/82.)

16.8.1304 MAJOR OPEN BURNING SOURCE RESTRICTIONS

A major open burning source must:

(1) Utilize best available control technology.

(2) Prior to open burning, submit an application to the department for an air quality open burning permit. The application must contain the following:

(a) a legal description of each planned site of open burning or a detailed map showing the location of each planned site of open burning.

(b) The elevation of each planned site of open burning.

(c) The method of burning to be utilized at each planned site of open burning.

(d) The average fuel loading or total fuel loading at each site to be burned.

(3) Receive and adhere to the conditions in any air quality open burning permit issued to it by the department, which will be in effect for one year from its date of issuance.

(4) In order to open burn in a manner other than that described in the application for an air quality open burning permit, submit to the department, in writing or by telephone, a request for a change in the permit, including the information required by subsection (3) above, and receive approval from the department. (History: Secs. 75-2-111, 75-2-203 MCA; IMP, Sec. 75-2-203 MCA; NEW, 1982 MAR p. 690, Eff. 4/16/82.)

16.8.1305 SPECIAL BURNING PERIODS (1) Essential agricultural open burning may be conducted only during the months of March through October.

(2) Prescribed wildland open burning, open burning performed to train fire fighters under ARM 16.8.1306 and open burning authorized under the emergency open burning permit provisions set forth in ARM 16.8.1308 may be conducted during the entire year.

(3) Open burning other than those categories listed in subsections (1) and (2) above may be conducted only during the months of March through August. (History: Secs. 75-2-111, 75-2-203 MCA; IMP, Sec. 75-2-203 MCA; NEW, 1982 MAR p. 691, Eff. 4/16/82.)

16.8.1306 FIREFIGHTER TRAINING Asphalt shingles, tarpaper, or insulated wire which is part of a building, and oil or petroleum products may be burned in the open for the purpose of training firefighters, if the fire is restricted to a building or structure or a permanent training facility, in a site other than a solid waste disposal site, and if the material to be burned is not allowed to smolder after the training session has terminated, and no public nuisance is created. (History: Sec. 75-2-111, 75-2-103, MCA; IMP, Sec. 75-2-203 MCA; NEW, 1982 MAR p. 691, Eff. 4/1/82.)

16.8.1307 CONDITIONAL AIR QUALITY OPEN BURNING PERMITS

(1) The department may issue a conditional air quality open burning permit for the disposal of:

(a) wood and wood byproduct trade wastes by any business, trade, industry, or demolition project if it determines that:

(i) open burning constitutes BACT; and

(ii) emissions from such open burning do not endanger public health and welfare or cause a violation of any Montana or federal ambient air quality standards.

(b) Untreated wood waste at licensed landfill sites if:

(i) alternative methods of disposal would result in extreme economic hardship to the solid waste management system owner or operator;

(ii) emissions from such open burning would not endanger public health and welfare or cause a violation of any Montana or federal ambient air quality standard; and

(iii) prior to issuance of the conditional air quality open burning permit, the wood waste pile is inspected by the department or its designated representative and no prohibited materials listed in ARM 16.8.1302, other than wood waste, are present.



(2) An air quality open burning permit issued under this Rule is valid for the following periods:

(a) wood and wood byproduct trade waste - one year, annually renewable.

(b) untreated wood waste at licensed landfill sites -- single burn. A new permit must be obtained for each burn.

(3) The department may place any reasonable requirements in a conditional air quality open burning permit that it determines will reduce emissions of air pollutants or will minimize the impact of said emissions, and the recipient of such a permit must adhere to those conditions. In the case of a permit granted pursuant to subsection (1)(a) above, BACT for the year covered by the permit will be set out within the terms of the permit, with the proviso that the source may be required, prior to each burn, to receive approval from the department of the date of the proposed burn to ensure that good ventilation exists and to assign priorities if other sources in the area request to burn on the same day. Approval may be obtained by calling the Air Quality Bureau at 406 - 449-3454.

(4) An application for a conditional air quality open burning permit must be made on a form provided by the department.

(5) A conditional air quality open burning permit granted pursuant to subsection (1)(a) above is a temporary measure to allow time for the entity generating the trade wastes to develop alternative means of disposal.

(6) The department must be reasonable when determining whether open burning constitutes BACT under subsection (1)(a)(i) above. (History: Secs. 75-2-111, 75-2-203 MCA; IMP, Sec. 75-2-203 MCA; NEW, 1982 MAR p. 691, Eff. 4/16/82.)

#### 16.8.1308 EMERGENCY OPEN BURNING PERMITS

(1) The department may issue an emergency air quality open burning permit to allow burning of a substance not otherwise approved for burning under this sub-chapter if the applicant demonstrates that the substance sought to be burned poses an immediate threat to public health and safety, or plant or animal life, and that no alternative method of disposal is reasonably available.

(2) Application for such a permit may be made to the department by telephone (406-449-3454) or in writing, and must include:

(a) Evidence why alternative methods of disposing of the substance are not reasonably available;

(b) Facts establishing that the substance to be burned poses an immediate threat to human health and safety or plant or animal life;

(c) The legal description or address of the site where the burn will occur;

(d) The amount of material to be burned; and

(e) The date and time of the proposed burn. (History: Secs. 75-2-111, 75-2-203 MCA; IMP, Sec. 75-2-203 MCA; NEW, 1982 MAR p. 692, Eff. 4/16/82.)

#### Sub-Chapter 14

#### Emission Standards

16.8.1401 PARTICULATE MATTER, AIRBORNE (1) For purposes of this rule, the following definitions apply:

(a) "Airborne particulate matter" means any particulate matter discharged into the outdoor atmosphere which is not discharged from the normal exit of a stack or chimney for which a source test can be performed in accordance with Method 5 (determination of particulate emissions from stationary sources), Appendix A, Part 60.275 (Test Method and Procedures), Title 40, Code of Federal Regulations [CFR] (Revised July 1, 1977).

(b) "Reasonable precautions" means any reasonable measure to control emissions of airborne particulate matter. Determination of what is reasonable shall be accomplished on a case-by-case basis taking into account energy, environmental, economic, and other costs.

(c) "Reasonably available control technology (RACT)" means a limitation of emissions from any source that is determined on a case-by-case basis to be reasonably available, taking into account energy, environmental, and economic impacts and other costs. Such an emission limitation shall only be required after consideration of the necessity of imposing such a limitation in order to attain and maintain a national ambient air quality standard (NAAQS) and alternative means of providing for attainment and maintenance of such a NAAQS.

(d) "Best available control technology (BACT)" means an emission limitation (including a visible emission standard)

based on the maximum degree of reduction for each pollutant subject to regulation under the Federal Clean Air Act as amended August 7, 1977, or the Montana Clean Air Act which would be emitted from any proposed stationary source or modification which the department, on a case-by-case basis, taking into account energy, environmental and economic impacts and other costs, determines is achievable for such source or modification through application of production processes or available methods, systems, and techniques, including fuel cleaning or treatment or innovative fuel combustion techniques for control of such contaminant. In no event shall application of the best available control technology result in emission of any contaminant which would exceed the emissions allowed by the applicable standard under 40 CFR Part 60 and 61. If the department determines that technological or economic limitations on the application of measurement methodology to a particular class of sources would make the imposition of an emission standard infeasible, it may instead prescribe a design, equipment, work practice or operational standard or combination thereof, to require the application of best available control technology. Such standard shall, to the degree possible, set forth the emission reduction achievable by implementation of such design, equipment, work practice or operation and shall provide for compliance by means which achieve equivalent results.

(e) "Lowest achievable emission rate (LAER)" means for any source, that rate of emissions which reflects:

(i) The most stringent emission limitation which is contained in the implementation plan of any state for such class or category of source, unless the owner or operator of the proposed source demonstrates that such limitations are not achievable, or

(ii) The most stringent emission limitation which is achieved in practice by such class or category of source, whichever is more stringent. In no event shall the application of this term permit a proposed new or modified source to emit any pollutant in excess of the amount allowable under applicable new source standards of performance under 40 CFR Part 60 and Part 61.

(2) No person shall cause or authorize the production, handling, transportation, or storage of any material unless reasonable precautions to control emissions of airborne particulate matter are taken. Such emissions of airborne particulate matter from any stationary source shall not exhibit an opacity of 20 percent or greater averaged over six consecutive minutes, except for emission of airborne particulate matter originating from any transfer ladle or operation engaged in the transfer of molten metal which was installed or operating prior to November 23, 1968.



(3) No person shall cause or authorize the use of any street, road, or parking lot without taking reasonable precautions to control emissions of airborne particulate matter.

(4) No person shall operate a construction site or demolition project unless reasonable precautions are taken to control emissions of airborne particulate matter. Such emissions of airborne particulate matter from any stationary source shall not exhibit an opacity of 20 percent or greater averaged over six consecutive minutes.

(5) Within any area designated non-attainment for either the primary or secondary national ambient air quality standards (NAAQS) for total suspended particulate (TSP), any person who owns or operates:

(a) any existing source of airborne particulate matter shall apply reasonably available control technology (RACT);

(b) any new source of airborne particulate matter that has a potential to emit less than 100 tons per year of particulates shall apply best available control technology (BACT);

(c) any new source of airborne particulate matter that has a potential to emit more than 100 tons per year of particulates shall apply lowest achievable emission rate (LAER).

(6) The provisions of this rule shall not apply to emissions of airborne particulate matter originating from any activity or equipment associated with the use of agricultural land or the planting, production, harvesting, or storage of agricultural crops (this exemption does not apply to the processing of agricultural products by a commercial business).

(History: Sec. 75-2-111, 75-2-203, MCA; IMP Sec. 75-2-203, MCA; Eff. 12/31/72; AMD, 1979 MAR p. 145; Eff. 2/16/79.)

#### 16.8.1402 PARTICULATE MATTER, FUEL BURNING EQUIPMENT

(1) No person shall cause, suffer, allow or permit particulate matter caused by the combustion of fuel to be discharged from any stack or chimney into the atmosphere in excess of the hourly rate set forth in the following table:

Heat Input in Million British Thermal Units per hour	Maximum Allowable Emissions of Particulate Matter in lbs. per million British Thermal Units	
	Existing Fuel Burning Equipment	New Fuel Burning Equipment
Up to and including 10	0.60	0.60
100	0.40	0.35
1,000	0.28	0.20
10,000 and above	0.19	0.12

(2) For a heat input between any two consecutive heat inputs stated in the preceding table, maximum allowable emissions of particulate matter are shown for existing fuel burning equipment on Figure 1 and for new fuel burning equipment on Figure 2 (pages 16-227 and 16-228). For the purposes hereof, heat input shall be calculated as the aggregate heat content of all fuels (using the upper limit of their range of heating value) whose products of combustion pass through the stack or chimney.

(3) When two or more fuel burning units are connected to a single stack, the combined heat input of all units connected to the stack shall not exceed that allowable for the same unit connected to a single stack.

(4) This rule does not apply to emissions from residential solid fuel combustion devices such as fireplaces and wood and coal stoves. (History: Sec. 75-2-111, 75-2-203, MCA; IMP, Sec. 75-2-203 MCA, Eff. 12/31/72; AMD, 1988 MAR p. 500, Eff. 3/11/88.)

#### 16.8.1403 PARTICULATE MATTER, INDUSTRIAL PROCESSES

(1) No person shall cause, suffer, allow, or permit to be discharged into the outdoor atmosphere from any operation, process or activity, particulate matter in excess of the amount shown in the following table. When the process weight falls between two values in the table, the maximum weight discharged per hour shall be determined by interpolation.

(2) When the process weight exceeds 60,000 pounds per hour, the maximum allowable weight discharged per hour will be determined by use of the following equation:

$$E = 55.0 P^{0.11} - 40$$

Where E = maximum rate of emission in pounds per hour, P = process weight rate in tons per hour.

Process Weight Rate lb/hr	Tons/hr	Rate of Emission lb/hr
100	0.05	0.551
200	0.10	0.877
400	0.20	1.40
600	0.30	1.83
800	0.40	2.22
1,000	0.50	2.58
1,500	0.75	3.38
2,000	1.00	4.10
2,500	1.25	4.76
3,000	1.50	5.38
3,500	1.75	5.96
4,000	2.00	6.52
5,000	2.50	7.58
6,000	3.00	8.56

Process Weight Rate lb/hr	Tons/hr	Rate of Emission lb/hr
7,000	3.50	9.49
8,000	4.00	10.4
9,000	4.50	11.2
10,000	5.00	12.00
12,000	6.00	13.6
16,000	8.00	16.5
18,000	9.00	17.9
20,000	10.00	19.2
30,000	15.00	25.2
40,000	20.00	30.5
50,000	25.00	35.4
60,000	30.00	40.0
70,000	35.00	41.3
80,000	40.00	42.5
90,000	45.00	43.6
100,000	50.00	44.6
120,000	60.00	46.3
140,000	70.00	47.8
160,000	80.00	49.0
200,000	100.00	51.2
1,000,000	500.00	69.0
2,000,000	1,000.00	77.6
6,000,000	3,000.00	92.7

Interpolation of the data in this table for process weight rates up to 60,000 lb/hr shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67}$$

Interpolation and extrapolation of the data for process weight rates in excess of 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 55.0 P^{0.11} - 40$$

Where E = rate of emission in pounds per hour and P = process weight rate in tons per hour.

(3) This rule shall not apply to particulate matter emitted from:

- (a) the reduction cells of a primary aluminum reduction plant;
- (b) those new stationary sources listed in ARM 16.8.1423 for which a particulate emission standard has been promulgated;
- (c) fuel burning equipment;
- (d) incinerators. (History: Sec. 75-2-111, 75-2-203, MCA; IMP, Sec. 75-2-203, MCA, Eff. 12/31/72; AMD, Eff. 7/5/74; AMD, Eff. 9/5/75.)



FIGURE 1

MAXIMUM EMISSION OF PARTICULATE MATTER  
FROM EXISTING FULE BURNING INSTALLATIONS

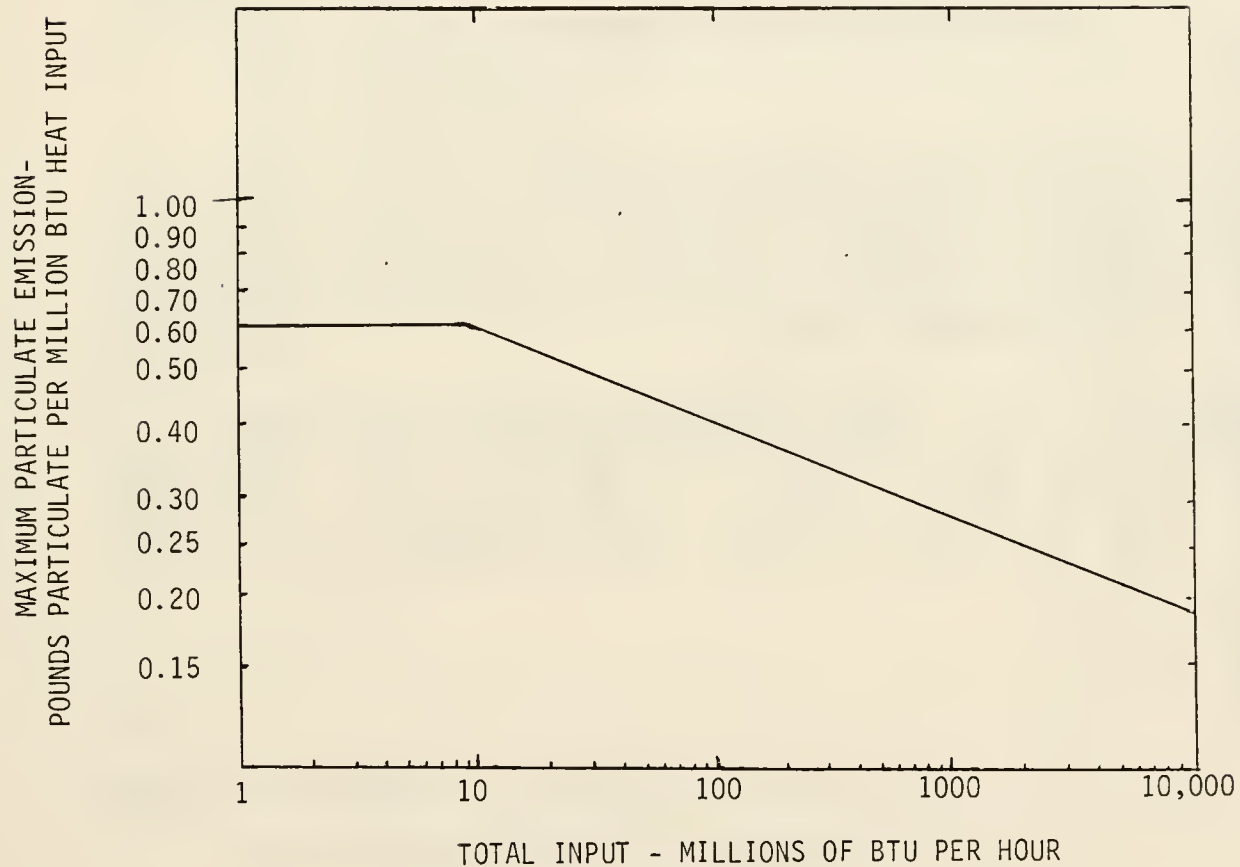
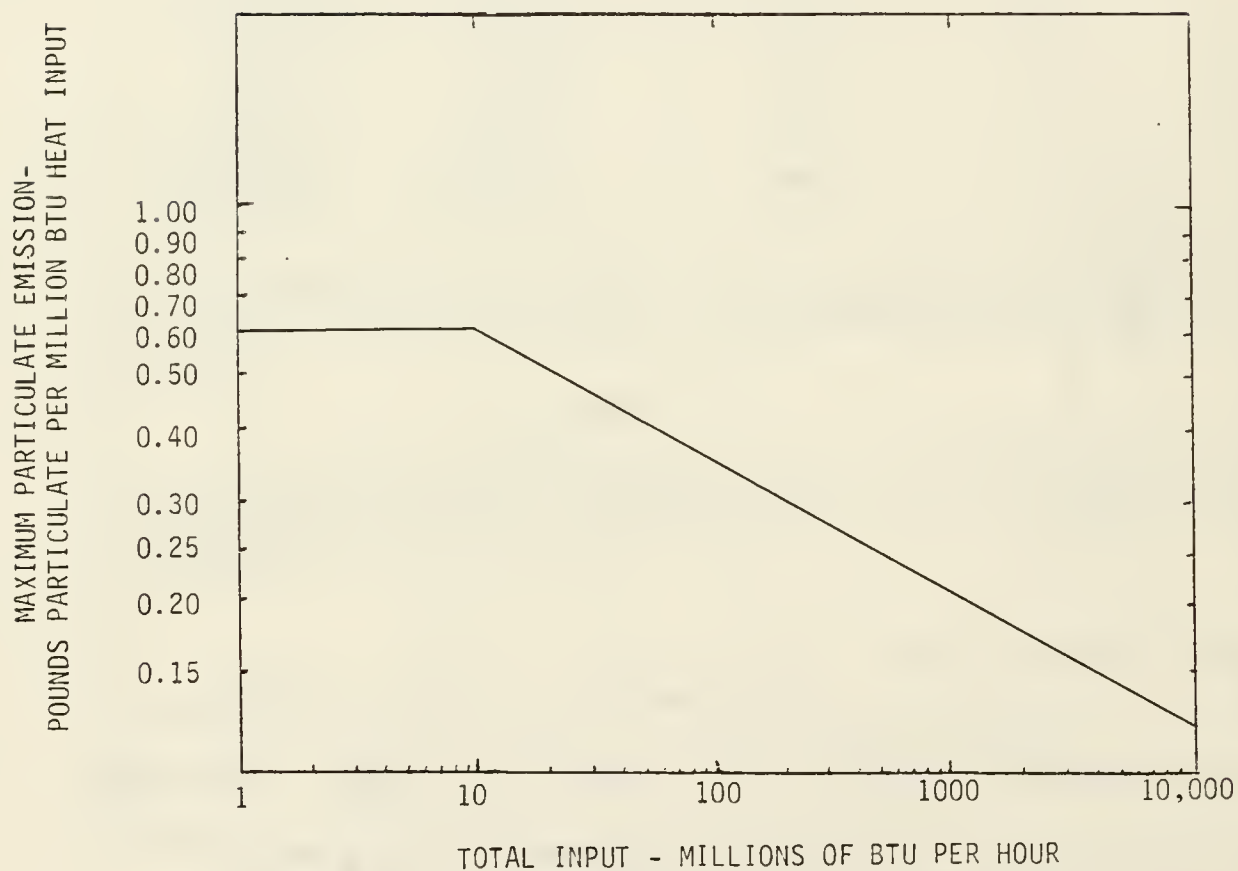


FIGURE 2

MAXIMUM EMISSION OF PARTICULATE MATTER  
FROM NEW FUEL BURNING INSTALLATIONS



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16.8.1404 VISIBLE AIR CONTAMINANTS (1) No person may cause or authorize emissions to be discharged into the outdoor atmosphere from any source installed on or before November 23, 1968, that exhibit an opacity of forty percent (40%) or greater averaged over six (6) consecutive minutes. The provisions of this subsection do not apply to transfer of molten metals or emissions from transfer ladles.

(2) No person may cause or authorize emissions to be discharged into the outdoor atmosphere from any source installed after November 23, 1968, that exhibit an opacity of twenty percent (20%) or greater averaged over six (6) consecutive minutes.

(3) During the building of new fires, cleaning of grates, or soot blowing, the provisions of sections (1) and (2) shall apply, except that a maximum average opacity of sixty percent (60%) is permissible for not more than one (1) four-minute period in any sixty (60) consecutive minutes. Such a four-minute period means any four (4) consecutive minutes.

(4) This rule does not apply to emissions from:

(a) wood-waste burners;

(b) incinerators;

(c) motor vehicles;

(d) those new stationary sources listed in ARM 16.8.1423 for which a visible emission standard has been promulgated; or

(e) residential solid-fuel combustion devices such as fireplaces and wood or coal stoves. (History: Sec. 75-2-111, 75-2-203, MCA; IMP Sec. 75-2-203, MCA; Eff. 12/31/72; AMD, 1978 MAR p. 1727, Eff. 12/29/78; AMD, 1986 MAR p.1021, Eff. 6/13/86.)

16.8.1405 OPEN BURNING RESTRICTIONS IS REPEALED  
(History: Sec. 75-2-111, 75-2-203, MCA; IMP Sec. 75-2-203, MCA; Eff. 12/31/72; AMD, 1977 MAR p. 259; Eff. 8/26/77; AMD, 1978 MAR p. 318; Eff. 8/11/78; AMD, 1979 MAR p. 486; Eff. 5/26/79; REP, 1982 MAR p. 688; Eff. 4/16/82.)

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16.8.1406 INCINERATORS (1) No incinerator shall be used for the burning of refuse unless such incinerator is a multiple chamber incinerator or one of other design of equal effectiveness approved by the department prior to installation or use.

(2) No person shall cause or authorize to be discharged into the outdoor atmosphere from any incinerator, particulate matter in excess of 0.10 grains per standard cubic foot of dry flue gas, adjusted to twelve percent (12%) carbon dioxide and calculated as if no auxiliary fuel had been used.

(3) No person shall cause or authorize to be discharged into the outdoor atmosphere from any incinerator emissions which exhibit an opacity of ten percent (10%) or greater averaged over six (6) consecutive minutes.

(4) The department may, for purposes of evaluating compliance with this rule, direct that no person shall operate or cause or authorize the operation of any incinerator at any time other than between the hours of 8:00 a.m. and 5:00 p.m. At those times when the operation of incinerators is prohibited by the department, the owner or operator of the incinerator shall store the refuse in a manner that will not create a fire hazard or arrange for the removal and disposal of the refuse in a manner consistent with ARM Title 16, Chapter 14, Sub-chapter 5.

(5) The provisions of this rule are applicable to performance tests for determining emissions of particulate matter from incinerators. All performance tests shall be conducted while the affected facility is operating at or above the maximum refuse charging rate at which such facility will be operated and the refuse burned shall be representative of normal operation and under such other relevant con-

ditions as the department shall specify based on representative performance of the affected facility. Test methods set forth in Title 40, Part 60, Code of Federal Regulations, or equivalent methods approved by the department shall be used. (History: Sec. 75-2-111, 75-2-203, MCA; IMP Sec. 75-2-203, MCA; Eff. 12/31/72; AMD, Eff. 9/5/75; AMD, 1978 MAR p. 1731; Eff. 12/29/78.)

16.8.1407 WOOD-WASTE BURNERS (1) Construction, reconstruction, or substantial alteration of wood-waste burners is prohibited unless the requirements of sub-chapter 11 of this chapter have been met.

(2) No person shall cause or authorize to be discharged into the outdoor atmosphere from any wood-waste burner any emissions which exhibit an opacity of twenty percent (20%) or greater averaged over six (6) consecutive minutes.

(3) No person shall cause or authorize to be discharged into the outdoor atmosphere from any wood-waste burner particulate matter in excess of 0.1 grains per standard cubic foot corrected to twelve percent (12%) CO<sub>2</sub>.

(4) A thermocouple and a recording pyrometer or other temperature measurement and recording device approved by the department shall be installed and maintained on each wood-waste burner. The thermocouple shall be installed at a location six (6) inches above and near the center of the horizontal screen or at another location approved by the department.

(5) A daily written log of the wood-waste burner's operation shall be maintained by the owner or operator to determine optimum patterns of operations for various fuel and atmospheric conditions. The log shall include, but not be limited to, the time of day, draft settings, exit gas temperature, type of fuel, and atmospheric conditions. The log or a copy of it shall be submitted to the department within ten (10) days after it is requested.

(6) No person shall use a wood-waste burner for the burning of other than production process wood-waste transported to the burner by continuous flow conveying methods.

(7) Rubber products, asphaltic materials, or materials which cause dense smoke discharge shall not be burned or disposed of in wood-waste burners.

(8) Exception: For building of fires in wood-waste burners, the provisions of sections (2) and (3) of this rule may be exceeded for not more than sixty (60) minutes in eight (8) hours. (History. Sec. 75-2-111, 75-2-203, MCA; IMP Sec. 75-2-203, MCA; Eff. 12/31/72; AMD, 1978 MAR p. 1732; Eff. 12/29/79.)

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Rules 16.8.1408 through 16.8.1410 reserved

16.8.1411 SULFUR OXIDE EMISSIONS -- SULFUR IN FUEL

(1) "Btu" means British thermal unit which is the heat required to raise the temperature of one pound of water through one Fahrenheit degree.

(2) Commencing July 1, 1970, no person shall burn liquid or solid fuels containing sulfur in excess of two pounds of sulfur per million Btu fired.

(3) Commencing July 1, 1971, no person shall burn liquid or solid fuels containing sulfur in excess of 1.5 pounds of sulfur per million Btu fired.

(4) Commencing July 1, 1972, no person shall burn liquid or solid fuels containing sulfur in excess of one pound of sulfur per million Btu fired.

(5) Commencing July 1, 1971, no person shall burn any gaseous fuel containing sulfur compounds in excess of 50 grains per 100 cubic feet of gaseous fuel, calculated as hydrogen sulfide at standard conditions. The provisions of subsection (5) shall not apply to:

(a) The burning of sulfur, hydrogen sulfide, acid sludge or other sulfur compounds in the manufacturing of sulfur or sulfur compounds.

(b) The incinerating of waste gases provided that the gross heating value of such gases is less than 300 Btu's per cubic foot at standard conditions and the fuel used to incinerate such waste gases does not contain sulfur or sulfur compounds in excess of the amount specified in this rule.

(c) The use of fuels where the gaseous products of combustion are used as raw materials for other processes.

(d) Small refineries (under 10,000 barrels per day crude oil charge) provided that they meet other provisions of this rule.

(6) The following are exceptions to this rule:

(a) A permit may be granted by the director to burn fuels containing sulfur in excess of the sulfur contents indicated in subsections (2), (3), (4), and (5) provided it can be shown that the facility burning the fuel is fired at a rate of one million Btu per hour or less.

(b) For purpose of this rule, a higher sulfur-containing fuel may, upon application to the director, be utilized in subsections (2), (3) or (4) if such fuel is mixed with one or more lower sulfur-containing fuels which results in a mixture, the equivalent sulfur content of which is not in excess of the stated values when fired.

(c) The requirements of subsections (2), (3), or (4) shall also be deemed to have been satisfied if, upon application to the director, a sulfur dioxide control process is applied to remove the sulfur dioxide from the gases emitted



by burning of fuel of any sulfur content which results in an emission of sulfur in pounds per hour not in excess of the pounds per hour of sulfur that would have been emitted by burning fuel of the sulfur content indicated without such a cleaning device. (History: Sec. 75-2-111, 75-2-203, MCA; IMP Sec. 75-2-203, MCA; Eff. 12/31/72.)

16.8.1412 SULFUR OXIDE EMISSIONS--PRIMARY COPPER SMELTERS

(1) No person may cause an emission of reduced sulfur from any copper smelting operation in excess of the amount shown in the following table:

Total Feed of Sulfur, lb/hr	Allowable Sulfur Emission, lb/hr
1,000	100
5,000	500
10,000	1,000
20,000	2,000
40,000	4,000
60,000	6,000
80,000	8,000
100,000	10,000
Over 100,000	10,000

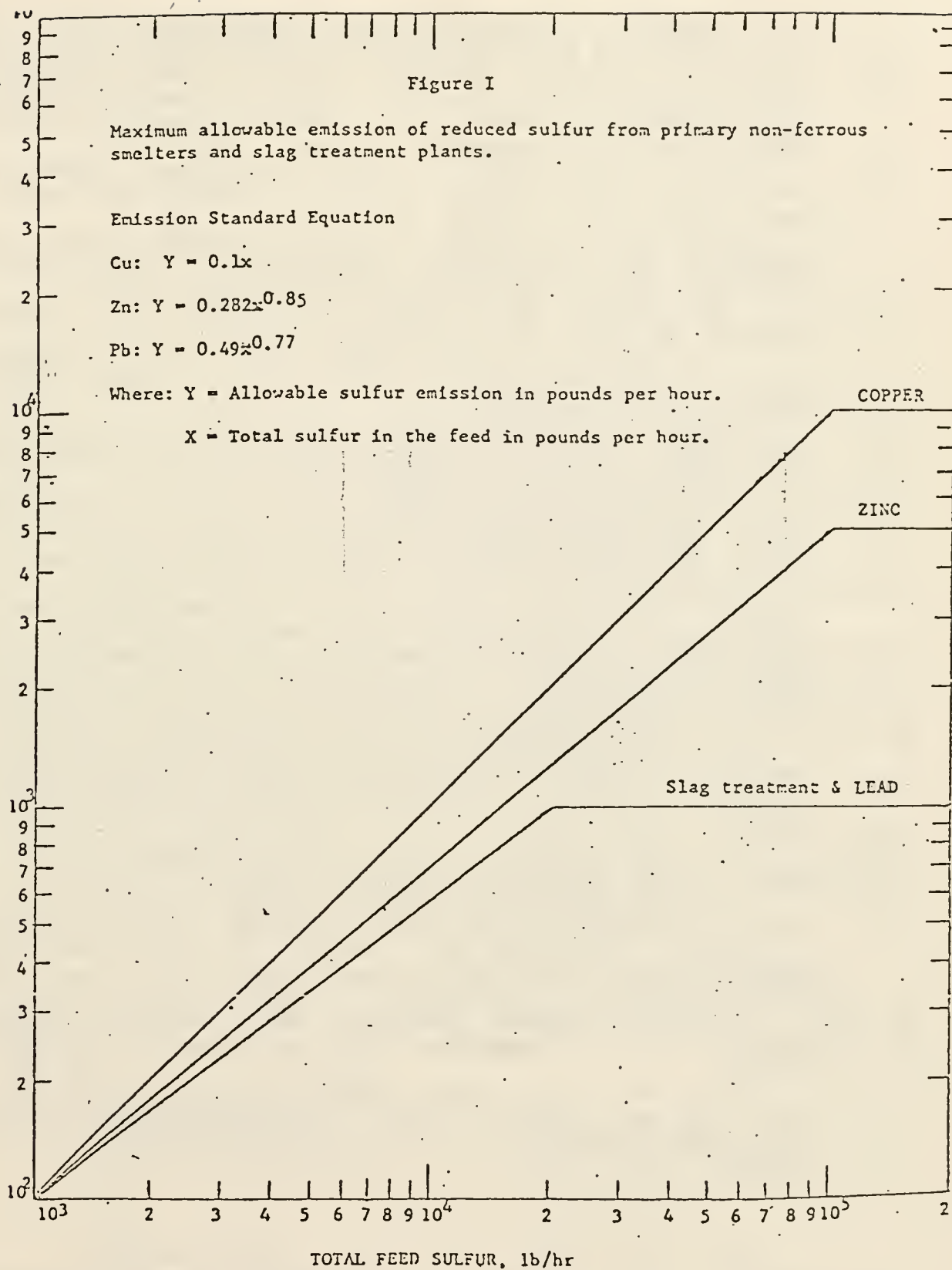
(2) For a total sulfur feed input between any two consecutive total sulfur feed inputs stated in the preceding table, maximum allowable emissions are shown in Figure 1 which follows this rule and by reference is made a part of this rule. For the purposes of this rule, total sulfur input must be calculated as the aggregate sulfur content of all fuels and other feed materials whose products of combustion and gaseous by-products pass through the stack or chimney.

(a) When two or more furnaces, roasters, converters or other similar devices for converting copper ores, concentrates, residues or slag to the metal or the oxide of the metal either wholly or in part are connected to a single stack, the combined sulfur input of all units connected to the stack must be used to determine the allowable emission from the stack.

(b) When a single furnace, roaster, converter or other similar device for converting copper ores, concentrates, residues, or slag to the metal or the oxide of the metal either wholly or in part is connected to two or more stacks, the allowable emission from all the stacks combined must not exceed that allowable from the same unit connected to a single stack.

(3) The effective date of this rule for existing operations is June 30, 1973. For new operations, the effective date is June 30, 1970. (History: Sec. 75-2-111, 75-2-203, MCA; IMP Sec. 75-2-203, MCA; Eff. 12/31/72; AMD, 1981 MAR p. 203, Eff. 3/13/81.)

# HEALTH AND ENVIRONMENTAL SCIENCES



16.8.1413 SULFUR EMISSIONS --KRAFT PULP MILLS (1) For the purposes of this rule, the following definitions apply:

(a) "Continual monitoring" means sampling and analysis, in a continuous or times sequence, using techniques which will adequately reflect actual emission levels or concentrations on a continuous basis.

(b) "Kraft mill" or "mill" means any pulping process which uses, for cooking liquor, an alkaline sulfate solution containing sodium sulfide.

(c) "Non-condensibles" means gases and vapors from the digestion and evaporation processes of a mill that are not condensed with the equipment used in those processes.

(d) "Parts per million" means parts of a contaminant per million parts of gas by volume.

(e) "Recovery furnace stack" means the stack from which the products of combustion from the recovery furnace are emitted to the ambient air.

(f) "Total reduced sulfur (TRS)" means hydrogen sulfide, mercaptans, dimethyl sulfide, dimethyl disulfide, and any other organic sulfides present.

(2) No person or persons shall cause, suffer, allow or permit to be discharged into the outdoor atmosphere from any Kraft pulping mill total reduced sulfur in excess of 0.087 pounds per 1,000 pounds of black liquor from each recovery furnace stack or 17.5 parts per million, expressed as hydrogen sulfide on a dry gas basis, whichever is more restrictive or such other limit of TRS that proves to be reasonably attainable utilizing the latest in design of recovery furnace equipment, controls and procedures but not more than 0.087 pounds of TRS per 1,000 pounds of black liquor.

(3) Non-condensibles from digesters and multiple-effect evaporators shall be treated to reduce the emission of TRS equal to the reduction achieved by thermal oxidation in a lime kiln.

(4) Every Kraft mill in the state shall install equipment for the continual monitoring of TRS.

(a) The monitoring equipment shall be capable of determining compliance with these standards and shall be capable of continual sampling and recording of the concentrations of TRS contaminants during a time interval not greater than 30 minutes.

(b) The sources monitored shall include, but are not limited to, the recovery furnace stacks and the lime kiln stacks.

(c) Each mill shall sample the recovery furnace, lime kiln, and smelt tank for particulate emissions on a regularly scheduled basis in accordance with its approved sampling program.

(d) Equipment shall be ordered within 30 days after a monitoring program has been approved in writing by the director. The equipment shall be placed in effective operation in accordance with the approved program within 60 days after delivery.

(5) Unless otherwise authorized by the director, data shall be reported by each mill at the end of each calendar month as follows:

(a) Daily average emission of TRS gases expressed in pounds of sulfur per 1,000 pounds of black liquor fired for each source included in the approved monitoring program.

(b) The number of hours each day that the emission of TRS gases from each recovery furnace stack exceeds 17.5 parts per million dry and the maximum concentration of TRS measured each day.

(c) Emission of TRS gases in pounds of sulfur per 1,000 pounds of black liquor fired in the Kraft recovery furnace on a monthly basis and pounds of sulfur per hour for the other sources included in the approved monitoring program. Emission of particulates in pounds per hour based upon a sampling conducted in accordance with the approved monitoring program.

(d) Average daily Kraft pulp production in air-dried tons and average daily black liquor burning rate.

(e) Other emission data as specified in the approved monitoring program.

(6) Each Kraft mill shall furnish, upon request of the director, such other pertinent data as may be required to evaluate the mill's emission control program. Each mill shall immediately report abnormal mill operations which result in increased emissions of air contaminants, following procedures set forth in the approved monitoring program.

(7) All emission standards in this rule shall be based on average daily emissions. The limitations herein shall not preclude a requirement to install the highest and best practicable treatment and control available. New mills or mills expanding existing facilities may be required to meet more restrictive emission limits. (History: Sec. 75-2-111, 75-2-203, MCA; IMP 75-2-203, MCA; Eff. 12/31/72.)

16.8.1414 SULFUR OXIDE EMISSIONS--LEAD OR LEAD-ZINC SMELTING FACILITIES (1) No person may cause an emission of sulfur dioxide from a lead or lead-zinc smelter stack, as described below, existing on January 1, 1980, in excess of the amount set forth below:

<u>Lead or Lead-Zinc Smelter Source</u>	<u>Emission Limitation</u>
Main (Sinter Machine) Stack	80 tons/day 20 tons/6 hours
Blast Furnace Baghouse Stack	23 tons/day 5.75 tons/6 hours



(2) Compliance with subsection (1) of this rule shall be determined by source testing as specified by 40 CFR, Part 60, Appendix A -- Reference Methods, "Method 6 -- Determination of Sulfur Dioxide Emissions from Stationary Sources" (as modified to the satisfaction of the department) or "Method 8 -- Determination of Sulfuric Acid Mist and Sulfur Dioxide Emissions from Stationary Sources," and the source testing shall consist of averaging 3 separate 1-hour tests using the applicable testing methods.

(3) The department hereby adopts and incorporates by reference 40 CFR, Part 60, Appendix A -- Reference Methods, Method 6 -- Determination of Sulfur Dioxide Emissions from Stationary Sources and Method 8 -- Determination of Sulfuric Acid Mist and Sulfur Dioxide Emissions from Stationary Sources. 40 CFR, Part 60, Appendix A, Methods 6 and 8 are federal rules setting forth procedures for extracting gas samples from the emitting source and performing tests thereon to determine amounts of contaminants contained in such gases. A copy of 40 CFR, Part 60, Appendix A, Methods 6 and 8, may be obtained from the Air Quality Bureau, Department of Health and Environmental Sciences, Cogswell Building, Capitol Station, Helena, Montana, 59620. (History: Sec. 75-2-111 MCA; IMP, Sec. 75-2-203 MCA; NEW, 1981 MAR p. 203, Eff. 3/13/81.)

Rules 16.8.1415 through 16.8.1418 reserved

16.8.1419 FLUORIDE EMISSIONS -- PHOSPHATE PROCESSING

(1) No person shall cause, suffer, allow or permit to be discharged into the outdoor atmosphere from any phosphate rock or phosphorite processing equipment or equipment used in the production of elemental phosphorous, enriched phosphates, phosphoric acid, defluorinated phosphates, phosphate fertilizers or phosphate concentrates or any equipment used in the processing of fluorides enriched wastewater fluorides in a

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gaseous or particulate form or any combination of gaseous or particulate forms in excess of 0.3 pounds per ton of  $P_2O_5$  (phosphorous pentoxide) introduced into the process of any calcining, nodulizing, defluorinating or acidulating process or any combination of the foregoing, or any other process, except aluminum reduction, capable of causing a release of fluorides in the form or forms indicated in subsection (1).

(2) No person or persons shall cause, suffer, allow or permit to be released into the outdoor atmosphere from any storage pond, settling basin, ditch, liquid holding tank or other liquid holding or conveying device from operations outlined in subsection (1) fluorides in excess of 108 micrograms per square centimeter per 28 days ( $ug/cm^2/28$  days) using the calcium formate paper method. Papers shall be exposed in a standard Montana Box located not less than 18 inches or more than 48 inches above the level of the liquid in the devices herein enumerated and not more than 16 inches laterally from the liquid's edge. Other locations may be permitted if approved by the director.

(3) Not less than four such sampling stations shall be placed at locations designated by the director. Two or more calcium formate papers, as designated by the director, shall be exposed in the standard Montana Box for a period designated by the director. Regardless of the duration of the sampling period, the values determined shall be corrected to 28 days.

(4) A minimum of two calcium formate papers for each sampling period from each sample box shall be provided the director if requested and within ten days from the date of request.

(5) Calcium formate papers shall be prepared as follows:

(a) Soak Whatman #2, 11 cm. filter papers in a 10 percent solution of calcium formate for five minutes.

(b) Dry in a forced air oven at  $80^{\circ}$  C. Remove immediately when dryness is reached.

(6) Calcium formate papers shall be exposed as follows:

(a) Two papers, or more, if directed, are suspended in a standard Montana Box on separate hangers at least two inches apart.

(b) Exposure shall be for 28 days  $\pm$  3 days unless otherwise indicated by the director.

(c) Calcium formate papers shall be kept in an air tight container both before and after exposure until the time of analysis.

(7) Analysis of calcium formate papers is adapted from Standard Methods for the Examination of Water and Waste Water; using Willard-Winter perchloric acid distillations and Spadns-Zirconium Lake method for fluoride determination. (History: Sec. 75-2-111, 75-2-203, MCA; IMP Sec. 75-2-203, MCA; Eff. 12/31/72.)

16.8.1420 FLUORIDE AND PARTICULATE EMISSIONS -- ALUMINUM PLANTS IS REPEALED (History: Sec. 75-2-111, 75-2-203, MCA; IMP, Sec. 75-2-203, MCA, Eff. 12/31/72; AMD, Eff. 7/5/74; REP, 1981 MAR p. 357, Eff. 4/17/81.)

Rules 16.8.1421 and 16.8.1422 reserved

16.8.1423 STANDARD OF PERFORMANCE FOR NEW STATIONARY SOURCES (1) For the purpose of this rule, the following definition applies:

(a) "Stationary source" means any building, structure, facility, or installation which emits or may emit any air pollutant subject to regulation under the Federal Clean Air Act, 42 U.S.C. §1857, et seq., as amended in 1977.

(2) The terms and associated definitions specified in 40 CFR §60.2, July 1, 1987, shall apply to this rule.

(3) The owner and operator of any stationary source or modification, as defined and applied in 40 CFR Part 60, July 1, 1987, shall comply with the standards and provisions of 40 CFR Part 60, July 1, 1987.

(4) For the purpose of this rule, the board hereby adopts and incorporates by reference 40 CFR Part 60, July 1, 1987, which pertains to standards of performance for new stationary sources and modifications. 40 CFR Part 60, July 1, 1987, is available for public inspection and copying at the Air Quality Bureau, Department of Health and Environmental Sciences, Cogswell Building, 1400 Broadway, Helena, Montana; at EPA's Public Information Reference Unit, 401 M Street SW, Washington, DC 20460; and at the libraries of each of the ten EPA Regional Offices. Copies are also available as supplies permit from the U.S. Environmental Protection Agency, Research Triangle Park, NC 27711; and copies may be purchased from the National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22161. (History: Sec. 75-2-111, 75-2-203, MCA; IMP, Sec. 75-2-203, MCA; NEW, Eff. 9/5/75; AMD, Eff. 9/5/76; AMD, 1978 MAR p. 1621, Eff. 12/15/78; AMD, 1982 MAR p. 1744, Eff. 10/1/82; AMD, 1985 MAR p. 1326, Eff. 9/13/85; AMD, 1987 MAR p. 744, Eff. 7/20/87; AMD, 1988 MAR p. 500, Eff. 3/11/88.)

16.8.1424 EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS

(1) For the purpose of this rule, the terms and associated definitions specified in 40 CFR §61.02, July 1, 1987, shall apply.

(2) The owner or operator of any existing or new stationary source, as defined and applied in 40 CFR Part 61, July 1, 1987, shall comply with the standards and provisions of 40 CFR Part 61, July 1, 1987.

(3) For the purpose of this rule, the board hereby adopts and incorporates by reference 40 CFR Part 61, July 1, 1987,

which pertains to emission standards for hazardous air pollutants. 40 CFR Part 61, July 1, 1987, is available for public inspection and copying at the Air Quality Bureau, Department of Health and Environmental Sciences, Cogswell Building, 1400 Broadway, Helena, Montana 59620; at EPA's Public Information Reference Unit, 401 M Street SW, Washington, DC 20460; and at the libraries of each of the ten EPA Regional Offices. Copies are also available as supplies permit from the U.S. Environmental Protection Agency, Research Triangle Park, NC 27711; and copies may be purchased from the National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22161. (History: Sec. 75-2-111, 75-2-203, MCA; IMP, Sec. 75-2-203, MCA; NEW, Eff. 9/5/76; AMD, 1978 MAR p. 1621, Eff. 12/15/78; AMD, 1982 MAR p. 1744, Eff. 10/1/82; AMD, 1985 MAR p. 1326, Eff. 9/13/85; AMD, 1987 MAR p. 744, Eff. 7/20/87; AMD, 1988 MAR p. 500, Eff. 3/11/88.)

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16.8.1425 HYDROCARBON EMISSIONS -- PETROLEUM PRODUCTS

(1) No person shall place, store or hold in any stationary tank, reservoir or other container of more than 65,000 gallons capacity any crude oil, gasoline or petroleum distillate having a vapor pressure of 2.5 pounds per square inch absolute or greater under actual storage conditions, unless such tank, reservoir or other container is a pressure tank maintaining working pressures sufficient at all times to prevent hydrocarbon vapor or gas loss to the atmosphere, or is designed and equipped with one of the following vapor loss control devices, properly installed, in good working order and in operation:

(a) A floating roof, consisting of a pontoon type or double deck type roof, resting on the surface of the liquid contents and equipped with a closure seal, or seals to close space between the roof edge and tank wall. The control equipment provided for in this paragraph shall not be used if the gasoline or petroleum distillate has a vapor pressure of 13.0 pounds per square inch absolute or greater under actual storage conditions. All tank gauging and sampling devices shall be gas-tight except when gauging or sampling is taking place.

(b) A vapor recovery system, consisting of a vapor gathering system capable of collecting the hydrocarbon vapors and gases discharged and a vapor disposal system capable of processing such hydrocarbon vapors and gases so as to prevent their emission to the atmosphere and with all tank gauging and sampling devices gas-tight except when gauging or sampling is taking place.

(c) Other equipment of equal efficiency provided such equipment has been approved by the administrator.

(2) No person shall use any compartment of any single or multiple compartment oil-effluent water separator which compartment receives effluent water containing 200 gallons a day or more of any petroleum product from any equipment processing, refining, treating, storing or handling kerosene or other petroleum product of equal or greater volatility than kerosene, unless such compartment is equipped with one of the following vapor loss control devices, constructed so as to prevent any emission of hydrocarbon vapors to the atmosphere, properly installed, in good working order and in operation.

(a) A solid cover with all openings sealed and totally enclosing the liquid contents. All gauging and sampling devices shall be gas-tight except when gauging or sampling is taking place.

(b) A floating roof, consisting of a pontoon type or double deck type roof, resting on the surface of the liquid contents and equipped with a closure seal, or seals, to close the space between the roof edge and containment wall. All gauging and sampling devices shall be gas-tight except when gauging or sampling is taking place.

(c) A vapor recovery system, consisting of a vapor gathering system capable of collecting the hydrocarbon vapors and gases discharged and a vapor disposal system capable of processing such hydrocarbon vapors and gases so as to prevent their emission to the atmosphere and with all tank gauging and sampling devices gas-tight except when gauging or sampling is taking place.

(d) Other equipment of equal efficiency provided such equipment has been approved by the administrator.

(e) This rule shall not apply to any oil-effluent water separator used exclusively in conjunction with the production of crude oil.

(3) No person shall load or permit the loading of gasoline into any stationary tank with a capacity of 250 gallons or more from any tank truck or trailer, except through a permanent submerged fill pipe, unless such tank is equipped with a vapor loss control device as described in subsection (1) of this rule, or is a pressure tank as described in subsection (1) of this rule.

(a) The provisions of the first paragraph of subsection (3) shall not apply to the loading of gasoline into any tank having a capacity of 2,000 gallons or less, which was installed prior to June 30, 1971 nor any underground tank installed prior to June 30, 1971 where the fill line between the fill connection and tank is offset.

(b) A person shall not install any gasoline tank with a capacity of 250 gallons or more unless such tank is equipped

as described in the first paragraph of subsection (3).

(4) The provisions of this rule do not apply to any stationary tank which is used primarily for the fueling of implements of husbandry.

(5) Existing refineries normally processing less than 7,000 barrels per day of crude oil charge shall be exempt from the provisions of this rule.

(6) Refineries normally processing 7,000 barrels per day or more of crude oil charge shall comply with subsection (1) of this rule by January 1, 1977.

(7) Facilities used exclusively for the production of crude oil shall be exempt from this rule. (History: Sec. 75-2-111, 75-2-203, MCA; IMP Sec. 75-2-203, MCA; Eff. 12/31/72; AMD, Eff. 9/5/75.)

16.8.1426 MOTOR VEHICLES (1) No person shall intentionally remove, alter or otherwise render inoperative, exhaust emission control, crank case ventilation or any other air pollution control device which has been installed as a requirement of federal law or regulation.

(2) No person shall operate a motor vehicle originally equipped with air pollution control devices as required by federal law or regulation unless such devices are in place and in operating condition. (History: Sec. 75-2-111, 75-2-203, MCA; IMP Sec. 75-2-203, MCA; Eff. 12/31/72.)

16.8.1427 ODORS (1) No person shall cause, suffer, or allow any emissions of gases, vapors, or odors beyond his property line in such manner as to create a public nuisance.

(2) A person operating any business or using any machine, equipment, device or facility or process which discharges into the outdoor air any odorous matter or vapors, gases, dusts, or any combination thereof which create odors, shall provide, properly install, and maintain in good working order and in operation such odor control devices or procedures as may be specified by the administrator.

(3) No person shall operate any business or use any such machine, equipment, device or facility in such manner as to create a public nuisance.

(4) Odor producing materials shall be so stored and handled that odors produced thereby do not create a public nuisance. No person shall accumulate such quantities of such materials as to permit spillage or other escape.

(5) Odor bearing gases, vapors, fumes, or dusts arising from materials in process shall be so confined at the point of origin as to prevent liberation of odorous matter. Confined gases, vapors, fumes, or dusts shall be treated before discharge to the atmosphere as required in subsections (2) and (3).



(6) Whenever dust, fumes, gases, mist, odorous matter, vapors, or any combination thereof escape so as to cause a public nuisance, the administrator may order that a building or buildings in which processing, handling, and storage are done be tightly closed and ventilated in such a way that all air and gases and air or gas-borne materials leaving the building are treated by incineration or other effective means for removal or destruction of odorous matter or other contaminants before discharge into the open air.

(7) No person shall operate or use any machine, equipment, device or facility for the reduction of animal matter unless all gases, vapors, and gas-entrained effluents from such facility are incinerated at a temperature of not less than 1200 $\frac{1}{2}$  Fahrenheit for a period of not less than 0.3 seconds, or processed in such manner as determined by the administrator to be equally or more effective for the purpose of air pollution control.

(8) A person incinerating or processing gases, vapors, or gas-entrained effluents pursuant to this rule shall provide, properly install and maintain in good working order and in operation, devices as specified by the administrator for indicating temperatures, pressure or other operating conditions. (History: Sec. 75-2-111, 75-2-203, MCA; IMP Sec. 75-2-203, MCA; Eff. 12/31/72; AMD, Eff. 9/5/75.)

16.8.1428 PROHIBITED MATERIALS FOR WOOD OR COAL RESIDENTIAL STOVES (1) No person may cause or authorize the use of the following materials to be combusted in any residential solid-fuel combustion device such as a wood, coal, or pellet stove or fireplace:

- (a) food wastes;
- (b) styrofoam and other plastics;
- (c) wastes generating noxious odors;
- (d) poultry litter;
- (e) animal droppings;
- (f) dead animals or dead animal parts;
- (g) tires;
- (h) asphalt shingles;
- (i) tarpaper;
- (j) insulated wire;
- (k) treated lumber and timbers including railroad ties;
- (l) pathogenic wastes;
- (m) colored newspaper or magazine print;
- (n) hazardous wastes as defined by 40 CFR Part 261; or
- (o) chemicals. (History: Sec. 75-2-111, 75-2-203, MCA; IMP Sec. 75-2-203, MCA; NEW, 1986 MAR p. 1021, Eff. 6/13/86.)

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## Sub-Chapter 15

## Emission Standards for Existing Aluminum Plants

16.8.1501 DEFINITIONS For the purposes of this rule, the following definitions apply:

(1) "Aluminum manufacturing" means the electrolytic reduction of alumina (aluminum oxide) to aluminum.

(2) "Emission" means a release into the outdoor atmosphere of total fluorides.

(3) "Existing primary aluminum reduction plant" means any facility manufacturing aluminum, by electrolytic reduction, which was in existence and operating on [date of rule adoption].

(4) "Owner or operator" means any person who owns, leases, operates, controls, or supervises an existing primary aluminum reduction plant.

(5) "Pot" means a reduction cell.

(6) "Total fluorides" means all fluoride compounds as measured by methods approved by the department. (History: Sec. 75-2-111 and 75-2-203 MCA; IMP, Sec. 75-2-203 MCA; NEW, 1982 MAR p. 390, Eff. 2/26/82.)

16.8.1502 STANDARDS FOR FLUORIDE (1) No owner or operator subject to the provisions of this rule may cause the emission into the atmosphere from any existing primary aluminum reduction plant of any gasses which contain total fluorides in excess of 1.3 kg/Mg (2.6 lb/ton) of aluminum produced at Soderberg plants averaged over any calendar month. (History: Sec. 75-2-111 and 75-2-203 MCA; IMP, Sec. 75-2-203 MCA; NEW, 1982 MAR p. 390, Eff. 2/26/82.)

16.8.1503 STANDARD FOR VISIBLE EMISSIONS (1) For the purposes of this rule, the board hereby adopts and incorporates herein by reference Method 9 of Appendix A of 40 CFR Part 60. Method 9 is included in the appendix to a federal agency rule and sets forth the method for visual determination of the opacity of emissions from stationary sources including the determination of plume opacity by qualified observers. The method also includes procedures for the training and certification of observers and procedures to be used in the field for determination of plume opacity. A copy of Test Method 9 may be obtained from the Air Quality Bureau, Department of Health and Environmental Sciences, Cogswell Building, Helena, Montana, 59620.

(2) No owner or operator subject to the provisions of this rule may cause the emission into the atmosphere of any gasses or particles which exhibit 10% opacity or greater as determined by EPA Reference Method 9 in Appendix A of Title 40, Part 60, of the Code of Federal Regulations. (History: Sec. 75-2-111 and 75-2-203 MCA; IMP, Sec. 75-2-203 MCA; NEW, 1982 MAR p. 390, Eff. 2/26/82.)

16.8.1504 MONITORING AND REPORTING (1) For the purpose of this rule the board hereby adopts and incorporates by reference 40 CFR Sec. 60.195 which sets forth test methods and procedures for primary aluminum reduction plants. A copy of this incorporated material may be obtained from the Air Quality Bureau, Department of Health and Environmental Sciences, Cogswell Building, Helena, Montana, 59620.

(2) An owner or operator shall submit by May 1, 1982 to the department a detailed monitoring program including, but not limited to, a description of monitoring equipment, monitoring procedures, monitoring frequency, and any other information requested by the department. The monitoring program must be approved by the department and may be revised from time to time by the department.

(3) In order to be approved by the department, the monitoring plan must meet the requirements of 40 CFR Sec. 60.195 or equivalent requirements established by the department.

(4) An owner or operator of an existing primary aluminum reduction plant shall submit a quarterly emission report to the department, no later than 45 days following the end of the calendar quarter reported, in a format and reporting parameters as requested by the department. (History: Sec. 75-2-111 and 75-2-203 MCA; IMP, Sec. 75-2-203 MCA; NEW, 1982 MAR p. 390, Eff. 2/26/82.)

16.8.1505 STARTUP AND SHUTDOWN (1) Operations during periods of startup and shutdown shall not constitute representative conditions for the purpose of determining compliance with this rule, nor shall emissions in excess of the levels required in ARM 16.8.1502 and 16.8.1503 during periods of startup and shutdown be considered a violation of the limits in ARM 16.8.1502 and 16.8.1503.

(2) At all times, including periods of startup and shutdown, owners and operators shall, to the extent practicable, maintain and operate any existing primary aluminum reduction plant including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions.

(3) Any owner or operator of an existing primary aluminum reduction plant shall maintain records of the occurrence and duration of any startup or shutdown in the operation of an affected facility and any period during which a continuous monitoring system or monitoring device is inoperative. (History: Sec. 75-2-111 and 75-2-203 MCA; IMP, Sec. 75-2-203 MCA; NEW, 1982 MAR p. 390, Eff. 2/26/82.)



## Sub-Chapter 16

## Combustion Device Tax Credit

16.8.1601 CERTIFICATION AND TESTING STANDARDS (1) Any stove, furnace, or catalytic converter added to a stove or furnace which burns wood or another nonfossil biomass fuel is eligible for the tax credit provided for in 15-32-201, MCA, if it is:

(a) Purchased and installed during the period from January 1, 1985, through December 31, 1992;

(b) Tested according to the criteria and procedures set out in Sections 340-21-100 through 340-21-190 of the Oregon Administrative Rules; and

(c) Certified by either the Oregon department of environmental quality or the Montana department of health and environmental sciences as emitting less than 6 grams per hour (weighted average) of particulate when tested according to the procedures referred to in (b) above.

(2) A catalytic converter is eligible for the tax credit only if the converter and the particular model and brand of stove or furnace to which it is attached have been tested and certified together as meeting the emission limit cited in (1) (c) above.

(3) The department hereby adopts and incorporates by reference Sections 340-21-100 through 340-21-190 of the Oregon Administrative Rules, which set criteria and procedures for testing emissions from wood stoves. Copies of OAR Section 340-21-100 through 340-21-190 may be obtained from the Air Quality Bureau, Department of Health and Environmental Sciences, Cogswell Building, Capitol Station, Helena, Montana 59620. (History: Sec. 15-32-203 MCA; IMP, Sec. 15-32-102, 15-32-201 MCA; NEW, 1985 MAR p. 2004, Eff. 12/27/85.)

16.8.1602 CERTIFIED STOVES (1) As of November 26, 1985, the following stoves meet the certification standards of ARM 16.8.1601 and qualify for a tax credit:

	<u>Model</u>	<u>Design Number</u>	<u>Manufacturer</u>
(a)	Blaze King 'King'	KEJ-1101	Woodcutters Mfg.
(b)	Fisher	TECH IV	CESCO Industries
(c)	Pellefier	FS-1	Collins Bio-Energy Co.
(d)	Timber Eze	477	Timber Eze, Inc.
(e)	Vista	640	Stack Mfg. Co., Ltd.
(f)	Arrow ATS-II	5000	Arrow Tualatin, Inc.
(g)	Earth Stove 1000C	E.S.01	The Earth Stove, Inc.
(h)	The Whitfield Stove		Pyro Industries
(i)	Turbo 10	T-10WC	Burning Log, Ltd.
(j)	Collins Hopper	4000	Collins Enterprises, Inc.



(2) A current list of all stoves, furnaces, and catalytic converters which, including and in addition to those listed in (1) above, meet the certification standards of ARM 16.8.1601 and qualify for a tax credit is available from the department's Air Quality Bureau, Cogswell Building, Capitol Station, Helena, Montana 59620 (phone: 444-3454). (History: Sec. 15-32-203 MCA; IMP, Sec. 15-32-102, 15-32-201 MCA; NEW, 1985 MAR p. 2004, Eff. 12/27/85.)

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